### 1NC – Shell

#### Biotech industry strong now.

Cancherini et al. 4/30 [(Laura, Engagement Manager @ McKinsey & Company, Joseph Lydon, Associate Partner @ McKinsey & Company, Jorge Santos Da Silva, Senior Partner at McKinsey & Company, and Alexandra Zemp, Partner at McKinsey & Company), “What’s ahead for biotech: Another wave or low tide?“, McKinsey & Company, 4-30-2021, https://www.mckinsey.com/industries/pharmaceuticals-and-medical-products/our-insights/whats-ahead-for-biotech-another-wave-or-low-tide] TDI

As the pandemic spread across the globe in early 2020, biotech leaders were initially pessimistic, reassessing their cash position and financing constraints. When McKinsey and BioCentury interviewed representatives from 106 biotech companies in May 2020,4 half of those interviewed were expecting delays in financing, and about 80 percent were tight on cash for the next two years and considering trade-offs such as deferring IPOs and acquisitions. Executives feared that valuations would decline because of lower revenue projections and concerns about clinical-trial delays, salesforce-effectiveness gaps, and other operational issues.

Belying this downbeat mood, biotech has in fact had one of its best years so far. By January 2021, venture capitalists had invested some 60 percent more than they had in January 2020, with more than $3 billion invested worldwide in January 2021 alone.5 IPO activity grew strongly: there were 19 more closures than in the same period in 2020, with an average of $150 million per raise, 17 percent more than in 2020. Other deals have also had a bumper start to 2021, with the average deal size reaching more than $500 million, up by more than 66 percent on the 2020 average (Exhibit 3).6

What about SPACs?

The analysis above does not include special-purpose acquisition companies (SPACs), which have recently become significant in IPOs in several industries. Some biotech investors we interviewed believe that SPACs represent a route to an IPO. How SPACs will evolve remains to be seen, but biotechs may be part of their story.

Fundamentals continue strong

When we asked executives and investors why the biotech sector had stayed so resilient during the worst economic crisis in decades, they cited innovation as the main reason. The number of assets transitioning to clinical phases is still rising, and further waves of innovation are on the horizon, driven by the convergence of biological and technological advances.

In the present day, many biotechs, along with the wider pharmaceutical industry, are taking steps to address the COVID-19 pandemic. Together, biotechs and pharma companies have more than 250 vaccine candidates in their pipelines, along with a similar number of therapeutics. What’s more, the crisis has shone a spotlight on pharma as the public seeks to understand the roadblocks involved in delivering a vaccine at speed and the measures needed to maintain safety and efficacy standards. To that extent, the world has been living through a time of mass education in science research and development.

Biotech has also benefited from its innate financial resilience. Healthcare as a whole is less dependent on economic cycles than most other industries. Biotech is an innovator, actively identifying and addressing patients’ unmet needs. In addition, biotechs’ top-line revenues have been less affected by lockdowns than is the case in most other industries.

Another factor acting in the sector’s favor is that larger pharmaceutical companies still rely on biotechs as a source of innovation. With the top dozen pharma companies having more than $170 billion in excess reserves that could be available for spending on M&A, the prospects for further financing and deal making look promising.

For these and other reasons, many investors regard biotech as a safe haven. One interviewee felt it had benefited from a halo effect during the pandemic.

More innovation on the horizon

The investors and executives we interviewed agreed that biotech innovation continues to increase in quality and quantity despite the macroeconomic environment. Evidence can be seen in the accelerating pace of assets transitioning across the development lifecycle. When we tracked the number of assets transitioning to Phase I, Phase II, and Phase III clinical trials, we found that Phase I and Phase II assets have transitioned 50 percent faster since 2018 than between 2013 and 2018, whereas Phase III assets have maintained much the same pace. There could be many reasons for this, but it is worth noting that biotechs with Phase I and Phase II assets as their lead assets have accounted for more than half of biotech IPOs. Having an early IPO gives a biotech earlier access to capital and leaves it with more scope to concentrate on science.

Looking forward, the combination of advances in biological science and accelerating developments in technology and artificial intelligence has the potential to take innovation to a new level. A recent report from the McKinsey Global Institute analyzed the profound economic and social impact of biological innovation and found that biomolecules, biosystems, biomachines, and biocomputing could collectively produce up to 60 percent of the physical inputs to the global economy. The applications of this “Bio Revolution” range from agriculture (such as the production of nonanimal meat) to energy and materials, and from consumer goods (such as multi-omics tailored diets) to a multitude of health applications.

#### IP protections are key to innovation – recouping startup costs and high risk of failure

Grabowski et al 15 [(Henry, Professor of Economics, member of the faculty for the Health Sector Management Program, and Director of the Program in Pharmaceuticals and Health Economics at Duke University) “The Roles of Patents and Research And Development Incentives In Biopharmaceutical Innovation,” Health Affairs, 2/2015] JL

The essential rationale for patent protection for biopharmaceuticals is that long-term benefits in the form of continued future innovation by pioneer or brand-name drug manufacturers outweigh the relatively short-term restrictions on imitative cost competition associated with market exclusivity. Regardless, the entry of other branded agents remains an important source of therapeutic competition during the patent term.

Several economic characteristics make patents and intellectual property protection particularly important to innovation incentives for the biopharmaceutical industry. **5** The R&D process often takes more than a decade to complete, and according to a recent analysis by Joseph DiMasi and colleagues, per new drug approval (including failed attempts), it involves more than a billion dollars in out-of-pocket costs. **6** Only approximately one in eight drug candidates survive clinical testing. **6**

As a result of the high risks of failure and the high costs, research and development must be funded by the few successful, on-market products (the top quintile of marketed products provide the dominant share of R&D returns). **7**,**8** Once a new drug’s patent term and any regulatory exclusivity provisions have expired, competing manufacturers are allowed to sell generic equivalents that require the investment of only several million dollars and that have a high likelihood of commercial success. Absent intellectual property protections that allow marketing exclusivity, innovative firms would be unlikely to make the costly and risky investments needed to bring a new drug to market.

Patents confer the right to exclude competitors for a limited time within a given scope, as defined by patent claims. However, they do not guarantee demand, nor do they prevent competition from nonidentical drugs that treat the same diseases and fall outside the protection of the patents.

New products may enter the same therapeutic class with common mechanisms of action but different molecular structures (for example, different statins) or with differing mechanisms of action (such as calcium channel blockers and angiotensin receptor blockers). 9 Joseph DiMasi and Laura Faden have found that the time between a first-in-class new drug and subsequent new drugs in the same therapeutic class has been dramatically reduced, from a median of 10.2 years in the 1970s to 2.5 years in the early 2000s. 10 Drugs in the same class compete through quality and price for preferred placement on drug formularies and physicians’ choices for patient treatment.

Patents play an essential role in the economic “ecosystem” of discovery and investment that has developed since the 1980s. Hundreds of start-up firms, often backed by venture capital, have been launched, and a robust innovation market has emerged. **11** The value of these development-stage firms is largely determined by their proprietary technologies and the candidate drugs they have in development. As a result, the strength of intellectual property protection plays a key role in funding and partnership opportunities for such firms.

#### Biopharmaceutical innovation is key to prevent future pandemics and bioterror.

Marjanovic and Feijao 20 [(Sonja Marjanovic, Ph.D., Judge Business School, University of Cambridge. Carolina Feijao, Ph.D. in biochemistry, University of Cambridge; M.Sc. in quantitative biology, Imperial College London; B.Sc. in biology, University of Lisbon.) "How to Best Enable Pharma Innovation Beyond the COVID-19 Crisis," RAND Corporation, 05-2020, https://www.rand.org/pubs/perspectives/PEA407-1.html] TDI

As key actors in the healthcare innovation landscape, pharmaceutical and life sciences companies have been called on to develop medicines, vaccines and diagnostics for pressing public health challenges. The COVID-19 crisis is one such challenge, but there are many others. For example, MERS, SARS, Ebola, Zika and avian and swine flu are also infectious diseases that represent public health threats. Infectious agents such as anthrax, smallpox and tularemia could present threats in a bioterrorism context.1 The general threat to public health that is posed by antimicrobial resistance is also well-recognised as an area in need of pharmaceutical innovation. Innovating in response to these challenges does not always align well with pharmaceutical industry commercial models, shareholder expectations and competition within the industry. However, the expertise, networks and infrastructure that industry has within its reach, as well as public expectations and the moral imperative, make pharmaceutical companies and the wider life sciences sector an indispensable partner in the search for solutions that save lives. This perspective argues for the need to establish more sustainable and scalable ways of incentivising pharmaceutical innovation in response to infectious disease threats to public health. It considers both past and current examples of efforts to mobilise pharmaceutical innovation in high commercial risk areas, including in the context of current efforts to respond to the COVID-19 pandemic. In global pandemic crises like COVID-19, the urgency and scale of the crisis – as well as the spotlight placed on pharmaceutical companies – mean that contributing to the search for effective medicines, vaccines or diagnostics is essential for socially responsible companies in the sector. 2 It is therefore unsurprising that we are seeing industry-wide efforts unfold at unprecedented scale and pace. Whereas there is always scope for more activity, industry is currently contributing in a variety of ways. Examples include pharmaceutical companies donating existing compounds to assess their utility in the fight against COVID19; screening existing compound libraries in-house or with partners to see if they can be repurposed; accelerating trials for potentially effective medicine or vaccine candidates; and in some cases rapidly accelerating in-house research and development to discover new treatments or vaccine agents and develop diagnostics tests.3,4 Pharmaceutical companies are collaborating with each other in some of these efforts and participating in global R&D partnerships (such as the Innovative Medicines Initiative effort to accelerate the development of potential therapies for COVID-19) and supporting national efforts to expand diagnosis and testing capacity and ensure affordable and ready access to potential solutions.3,5,6 The primary purpose of such innovation is to benefit patients and wider population health. Although there are also reputational benefits from involvement that can be realised across the industry, there are likely to be relatively few companies that are ‘commercial’ winners. Those who might gain substantial revenues will be under pressure not to be seen as profiting from the pandemic. In the United Kingdom for example, GSK has stated that it does not expect to profit from its COVID-19 related activities and that any gains will be invested in supporting research and long-term pandemic preparedness, as well as in developing products that would be affordable in the world’s poorest countries.7 Similarly, in the United States AbbVie has waived intellectual property rights for an existing combination product that is being tested for therapeutic potential against COVID-19, which would support affordability and allow for a supply of generics.8,9 Johnson & Johnson has stated that its potential vaccine – which is expected to begin trials – will be available on a not-for-profit basis during the pandemic.10 Pharma is mobilising substantial efforts to rise to the COVID-19 challenge at hand. However, we need to consider how pharmaceutical innovation for responding to emerging infectious diseases can best be enabled beyond the current crisis. Many public health threats (including those associated with other infectious diseases, bioterrorism agents and antimicrobial resistance) are urgently in need of pharmaceutical innovation, even if their impacts are not as visible to society as COVID-19 is in the immediate term. The pharmaceutical industry has responded to previous public health emergencies associated with infectious disease in recent times – for example those associated with Ebola and Zika outbreaks.11 However, it has done so to a lesser scale than for COVID-19 and with contributions from fewer companies. Similarly, levels of activity in response to the threat of antimicrobial resistance are still low.12 There are important policy questions as to whether – and how – industry could engage with such public health threats to an even greater extent under improved innovation conditions.

#### Extinction – defense is wrong

Piers Millett 17, Consultant for the World Health Organization, PhD in International Relations and Affairs, University of Bradford, Andrew Snyder-Beattie, “Existential Risk and Cost-Effective Biosecurity”, Health Security, Vol 15(4), http://online.liebertpub.com/doi/pdfplus/10.1089/hs.2017.0028

Historically, disease events have been responsible for the greatest death tolls on humanity. The 1918 flu was responsible for more than 50 million deaths,1 while smallpox killed perhaps 10 times that many in the 20th century alone.2 The Black Death was responsible for killing over 25% of the European population,3 while other pandemics, such as the plague of Justinian, are thought to have killed 25 million in the 6th century—constituting over 10% of the world’s population at the time.4 It is an open question whether a future pandemic could result in outright human extinction or the irreversible collapse of civilization.

A skeptic would have many good reasons to think that existential risk from disease is unlikely. Such a disease would need to spread worldwide to remote populations, overcome rare genetic resistances, and evade detection, cures, and countermeasures. Even evolution itself may work in humanity’s favor: Virulence and transmission is often a trade-off, and so evolutionary pressures could push against maximally lethal wild-type pathogens.5,6

While these arguments point to a very small risk of human extinction, they do not rule the possibility out entirely. Although rare, there are recorded instances of species going extinct due to disease—primarily in amphibians, but also in 1 mammalian species of rat on Christmas Island.7,8 There are also historical examples of large human populations being almost entirely wiped out by disease, especially when multiple diseases were simultaneously introduced into a population without immunity. The most striking examples of total population collapse include native American tribes exposed to European diseases, such as the Massachusett (86% loss of population), Quiripi-Unquachog (95% loss of population), and theWestern Abenaki (which suffered a staggering 98% loss of population).

In the modern context, no single disease currently exists that combines the worst-case levels of transmissibility, lethality, resistance to countermeasures, and global reach. But many diseases are proof of principle that each worst-case attribute can be realized independently. For example, some diseases exhibit nearly a 100% case fatality ratio in the absence of treatment, such as rabies or septicemic plague. Other diseases have a track record of spreading to virtually every human community worldwide, such as the 1918 flu,10 and seroprevalence studies indicate that other pathogens, such as chickenpox and HSV-1, can successfully reach over 95% of a population.11,12 Under optimal virulence theory, natural evolution would be an unlikely source for pathogens with the highest possible levels of transmissibility, virulence, and global reach. But advances in biotechnology might allow the creation of diseases that combine such traits. Recent controversy has already emerged over a number of scientific experiments that resulted in viruses with enhanced transmissibility, lethality, and/or the ability to overcome therapeutics.13-17 Other experiments demonstrated that mousepox could be modified to have a 100% case fatality rate and render a vaccine ineffective.18 In addition to transmissibility and lethality, studies have shown that other disease traits, such as incubation time, environmental survival, and available vectors, could be modified as well.19-2

### 1NC – Case

#### Restricting IP protections undermines innovation and profit margins – turns case by precluding vaccine distribution to developing countries.

Cueni 12/10 [(Thomas, Director General of IFPMA, chair of the AMR Industry Alliance, Industry Co-Chair APEC Biopharmaceutical Working Group on Ethics, MA in politics from the London School of Economics) “The Risk in Suspending Vaccine Patent Rules,” New York Times, 12/10/2020] TDI

It is unclear how suspending patent protections would ensure fair distribution. But what is clear is that if successful, the effort would jeopardize future medical innovation, making us more vulnerable to other diseases.

Intellectual property rights, including patents, grant inventors a period of exclusivity to make and market their creations. By affording these rights to those who create intangible assets, such as musical compositions, software or drug formulas — people will invent more useful new things.

Development of a new medicine is risky and costly. Consider that scientists have spent decades — and billions of dollars — working on Alzheimer’s treatments, but still have little to show for it. The companies and investors who fund research shoulder so much risk because they have a shot at a reward. Once a patent expires, generic companies are free to produce the same product. Intellectual property rights underpin the system that gives us all new medicines, from psychiatric drugs to cancer treatments.

In trying to defend these rights, the drug industry has made mistakes in the past that have lost people’s trust. More than 22 years ago, for example, a group of drug companies sued the South African government for trying to import cheaper anti-AIDS drugs amid an epidemic. With price standing between patients and survival, the suit, which the companies eventually dropped, was a terrible misjudgment. The current situation is not parallel.

Several major drug companies, including AstraZeneca, GlaxoSmithKline and Johnson & Johnson, have pledged to offer their vaccines on a not-for-profit basis during the pandemic. Others are considering differential pricing for different countries. As of last month, four major pharmaceutical companies had already agreed to eventually produce at least three billion vaccine doses for low- and middle-income nations, according to one analysis.

In South Africa and India, pharmaceutical companies are already working with local partners to make their vaccines available. Johnson & Johnson has entered into a technology transfer partnership for its candidate vaccine with South Africa’s Aspen Pharmacare, and AstraZeneca has reached a licensing agreement with the Serum Institute of India to develop up to 1 billion doses of its vaccine for low and middle-income countries.

Companies can afford to license patents for free, or sell drugs at cost, precisely because they know that their intellectual property will be protected. That’s not a flaw in the system; it’s how the system ensures that pharmaceutical research will continue to be funded.

#### IP protections are key to pharmaceutical investment in developing countries.

Ezell and Cory 19 [(Stephen, vice president, global innovation policy, at the Information Technology and Innovation Foundation, B.S. from the School of Foreign Service at Georgetown University, and Nigel, associate director covering trade policy at the Information Technology and Innovation Foundation, former researcher in the Southeast Asia Program at the Center for Strategic and International Studies, MA in public policy from Georgetown University) “The Way Forward for Intellectual Property Internationally,” Information Technology and Innovation Foundation, 4/25/2019] TDI

Academic research also signals a strong correlation between IPR and technology transfer. Lippoldt showed that IPR strengthening in countries—particularly with respect to patents—is associated with increased technology transfer via trade and investment.34 Research has revealed that a country’s level of intellectual property protection considerably affects whether foreign firms will transfer technology into it.35 That matters because the welfare gains from the importation of technology via innovative products, while differing across countries, can be substantial.36 For instance, foreign sources of technology account for over 90 percent of domestic productivity growth in all but a handful of countries.37 The research on this matter is clear and consistent. For example, a 1986 United Nations Conference on Trade and Development (UNCTAD) study found that direct investment in new technology areas such as computer software, semiconductors, and biotechnology is supported by stronger intellectual property rights policy regimes.38 (However, as this report later clarifies, subsequent UNCTAD reports have lamentably taken a more skeptical view toward IP.) A 1989 study by the United Nations Commission on Transnational Corporations (UNCTC) found that weak IP rights reduce computer software direct investment; and a 1990 study by UNCTC found that weak IP rights reduce pharmaceutical investment.39 Mansfield conducted firm-level surveys and found that perceptions of strong IP rights abroad have a positive effect on incentives to transfer technologies abroad. Likewise, survey research by the World Bank’s International Finance Corporation found that, with variations by sector, country, and technology, at least 25 percent of American and Japanese high-tech firms refuse to directly invest, or enter into a joint venture, in developing countries with weak intellectual property rights; and a later study confirmed those survey findings with actual foreign direct investment data.40 And an Institute for International Economics study of World Bank data concluded that weak intellectual property rights reduce flows of all these commercial activities, regardless of nations’ levels of economic development.41

Studies have also shown how the benefits of intellectual property extend to developing countries. Diwan and Rodrik demonstrated that stronger patent rights in developing countries give enterprises from developed countries a greater incentive to research and introduce technologies appropriate to developing countries.42 Similarly, Taylor showed that weak patent rights in developing countries lead enterprises from developed countries to introduce less-than-best-practice technologies to developing countries.43 Interestingly, the relationship goes in both directions. Branstetter and Saggi showed that strengthened IPR protection not only improves the investment climate in the implementing countries, but also leads to increased FDI in the country producing the original innovation.44 They concluded that IPR reform in the “global South” (e.g., developing countries) may be associated with FDI increases in the “global North” (e.g., developed countries). As northern firms shift their production to southern affiliates, this FDI accelerates southern industrial development, creating a cyclical feedback mechanism that also benefits the North. Another study by Liao and Wong, which focused on firm-level analysis, highlights the inter-relationship of IPR reform in developed and developing countries. Their study concluded that developing countries can entice technology transfer from the North by providing IPR protection for incoming products (although they note there is a need for redoubled R&D efforts in developed countries to spur needed innovations).45

### 1NC – Aff Fails

#### A wholesale solution is key---the aff fails.

Stone 21. [(Judy Stone is an Infectious Disease specialist) “Covid Vaccine Equity - Developing Countries Need Our Help,” Forbes, May 11, 2021. <https://www.forbes.com/sites/judystone/2021/05/11/vaccine-equitydeveloping-countries-need-our-help/?sh=10939a363ec8>] TDI

The real problem is that vax is a good retail (one at a time) solution, whereas **in a pandemic you need a wholesale, behavioral semi-solution: masks, ventilation, quarantine.** With its nationalistic approach to global problems the previous administration brokered deals that prohibited donation of supplies, in part due to liability concerns of the manufacturers or shortages of raw materials. There has been a **great deal of debate over whether we should waive intellectual property rights**, given the urgency of the Covid pandemic. Some in industry feel it will stifle their innovation. Others reply that public and non-profits have provided over $10 billion towards research and development of vaccines. Furthermore, the U.S. government holds the patent for a technique for modifying the coronavirus protein used in vaccines produced by the major U.S. manufacturers. Unlike his predecessor, President Biden understands that sharing vaccine with other countries is also in our best interest, and joined the international Covax program. Covax is led by WHO, Gavi (Global vaccine alliance), CEPI (Coalition for Epidemic Preparedness Innovations) and the UN’s Children’s Fund (UNICEF). So far, only 0.3% of the vaccines that have been administered have gone to low-income countries, according to the Director-General of the World Health Organization (WHO) Tedros Adhanom Ghebreyesus. Covax’s goal is vaccinating 20% of the population of poorer countries. Covax had hoped to administer 2 billion vaccine doses in 2021 (that’s more than 25% of the world’s whole population); so far, they’ve only reached 29 million doses. We need at least a 70% vaccination rate to develop herd immunity and stop the pandemic. Another problem is that even if the patent protections are waived, allowing companies to have the “recipe” for producing vaccines, many **lack the technical know-how or experience to do so.** WHO is proposing a technology transfer hub to assist in this process.

### 1NC – Alt Causes

#### Overreliance on vaccines hurts overall pandemic response.

Lovelace 1/13 [(Berkeley, health-care reporter for CNBC, mainly covering pharmaceuticals and the Food and Drug Administration) "WHO says Covid vaccines aren’t ‘silver bullets’ and relying entirely on them has hurt nations," CNBC, 1-13-2021, https://www.cnbc.com/2021/01/15/who-says-covid-vaccines-arent-silver-bullets-and-relying-entirely-on-them-has-hurt-nations.html] TDI

The World Health Organization said Friday that [coronavirus](https://www.cnbc.com/2021/01/15/coronavirus-live-updates.html) vaccines aren’t “silver bullets” and relying solely on them to fight the pandemic has hurt nations. Some countries in Europe, Africa and the Americas are seeing spikes in Covid-19 cases “because we are collectively not succeeding at breaking the chains of transmission at the community level or within households,” WHO Director-General Tedros Adhanom Ghebreyesus said during a news conference from the agency’s Geneva headquarters. With [global deaths reaching 2 million](https://www.cnbc.com/2021/01/15/coronavirus-live-updates.html) and new variants of the virus appearing in multiple countries, world leaders need to do all they can to curb infections “through tried and tested public health measures,” Tedros said. “There is only one way out of this storm and that is to share the tools we have and commit to using them together.” The [coronavirus](https://www.cnbc.com/coronavirus/) has infected more than 93.3 million people worldwide and killed at least 2 million since the pandemic began about a year ago, according to data compiled by Johns Hopkins University. The virus continues to accelerate in some regions, with nations reporting that their supply of oxygen for Covid-19 patients is running “dangerously low,” the WHO said. Some countries, including the U.S., have focused heavily on the use of vaccines to combat their outbreaks. While vaccines are a useful tool, they will not end the pandemic alone, Mike Ryan, executive director of the WHO’s health emergencies program, said at the news conference. “We warned in 2020 that if we were to rely entirely on vaccines as the only solution, we could lose the very controlled measures that we had at our disposal at the time. And I think to some extent that has come true,” Ryan said, adding the colder seasons and the recent holidays also may have also played a role in the spread of the virus. “A big portion of the transmission has occurred because we are reducing our physical distancing. ... We are not breaking the chains of transmission. The virus is exploiting our lack of tactical commitment,” he added. “We are not doing as well as we could.” Dr. Bruce Aylward, a senior advisor to the WHO’s director-general, echoed Ryan’s comments, saying, vaccines are not “silver bullets” “Things can get worse, numbers can go up,” he said. We have vaccines, yes. But we have limited supplies of vaccines that will be rolled out slowly across the world. And vaccines are not perfect. They don’t protect everyone against every situation.” In the U.S., the pace of vaccinations is going slower than officials had hoped. As of Friday at 6 a.m. ET, more than 31.1 million doses of vaccine had been distributed across the U.S., but just over 12.2 million shots have been administered, according to data compiled by the Centers for Disease Control and Prevention. Meanwhile, cases are rapidly growing, with the U.S. recording at least 238,800 new Covid-19 cases and at least 3,310 virus-related deaths each day, based on a seven-day average calculated by CNBC using Johns Hopkins data. On Thursday, President-elect Joe Biden [unveiled a sweeping plan](https://www.cnbc.com/2021/01/14/biden-unveils-sweeping-plan-to-combat-the-covid-pandemic-in-the-us.html) to combat the coronavirus pandemic in the United States. While his administration will invest billions in a vaccine campaign, it will also scale up testing, invest in new treatments and work to identify new strains, among other measures.

### 1NC – WTO Cred

#### The US has structurally undermined WTO legitimacy

Baschuk 2/22 [(Bryce, reporter for Bloomberg Economics based in Geneva, Switzerland, has been published in Bloomberg, the Washington Times, United Press International and National Public Radio) “Biden Picks Up Where Trump Left Off in Hard-Line Stances at WTO,” Bloomberg, 2/22/2021] TDI

President Joe Biden’s administration dashed hopes for a softer approach to the World Trade Organization by pursuing a pair of his predecessor’s strategies that critics say risk undermining the international trading system.

The U.S. delegation to the WTO, in a statement Monday obtained by Bloomberg, backed the Trump administration’s decision to label Hong Kong exports as “[Made in China](https://www.bloomberg.com/news/articles/2020-10-30/hong-kong-takes-formal-wto-action-on-u-s-made-in-china-order)” and said the WTO had no right to mediate the matter because the organization’s rules permit countries to take any action to protect their “essential security interests.”

“The situation with respect to Hong Kong, China, constitutes a threat to the national security of the United States,” the U.S. delegation said. “Issues of national security are not matters appropriate for adjudication in the WTO dispute-settlement system.”

Prior to 2016, WTO members generally steered clear of defending their trade actions on the basis of national security because doing so could encourage other nations to pursue protectionist policies that have little or nothing to do with hostile threats.

That changed in 2018, when the Trump administration triggered a cold war-era law to justify tariffs on foreign imports of steel and aluminum. In response, a handful of U.S. trade partners, including Canada, the EU, and China filed disputes at the WTO and a ruling in those cases is expected later this year.

Since then, more nations -- including Saudi Arabia, India, Russia and others -- have cited the WTO’s national-security exemption in regional trade fights, leading trade experts to warn that such cases could erode the organization’s ability to mediate disputes.

The Biden administration on Monday said the U.S. has consistently argued that national-security disputes are not subject to WTO review because it would infringe on a member’s right to determine what is in its own security interests.

In spite of the U.S. objection, the WTO granted Hong Kong’s dispute inquiry and will establish a panel of experts to deliberate the matter and render a decision, which could take two to three years.

At the same meeting, the Biden administration said it would not agree to appoint new members to the WTO’s appellate body, a seven-member panel of experts who until 2019 had the final say on trade disputes involving billions of dollars worth of international commerce.

The Biden administration said it could not do so because the U.S. “continues to have systemic concerns” with the functioning of the appellate body as have all previous administrations over the past 16 years.

Though the statement was not entirely unexpected, it confirms America’s bipartisan frustration with the functioning of the WTO appellate body and the new administration’s willingness to block new panelists until changes can be agreed.

Once Katherine Tai is confirmed as the U.S. Trade Representative, her office “looks forward to working with” WTO Director-General Ngozi Okonjo-Iweala to tackle the problems with WTO dispute settlement, including the unresolved issues over appellate-body overreach, USTR spokesman Adam Hodge said in an email. “These are long-standing, bipartisan concerns that we hope our trading partners will work with us to address,” he said.

The Trump administration broke precedent when it refused to consider any nominees to fill vacancies on the panel until there weren’t enough to sign off on new rulings. As a result, the WTO’s dispute-settlement system has been critically damaged because WTO members are now free to veto any adverse dispute rulings by appealing them into a legal void created by the appellate body’s paralysis.

#### Biden and trump terminally thump WTO cred

Anne O. Krueger 5-24 [(Anne O. Krueger, a former World Bank chief economist and former first deputy managing director of the International Monetary Fund, is Senior Research Professor of International Economics at the Johns Hopkins University School of Advanced International Studies and Senior Fellow at the Center for International Development at Stanford University.) “Biden's Trumpy Start on Trade” <https://www.project-syndicate.org/commentary/bidens-trade-policy-is-a-lot-like-trumps-by-anne-o-krueger-2021-05>]TDI

WASHINGTON, DC – Former President Donald Trump did enormous damage to the United States’ reputation and future prospects, both domestically and internationally. Yet while President Joe Biden has set about reversing the previous administration’s legacy in many domains, he has yet to focus his attention on US trade policy. That needs to change. Trump’s trade policies were not only a disaster for US and world trade; they also have made it more difficult for the US to achieve a broader range of economic and foreign-policy goals. Reversing those policies thus should be a top priority for the new administration. After all, America’s friends and allies (particularly the European Union, the United Kingdom, Canada, Mexico, Japan, and South Korea) remain deeply shaken by Trump’s protectionist impulses. In addition to slapping tariffs on a broad range of goods, his administration forced a renegotiation of the North American Free Trade Agreement and the US-Korea Free Trade Agreement, and withdrew the US from the Trans-Pacific Partnership (TPP) to which the US had agreed. It declared a “trade war” with China, despite that country’s membership in the World Trade Organization (WTO), and with no regard for US trading partners’ own dealings with China. Taken together, these policies have done serious damage to America’s standing in the world. Leading the world toward an open multilateral trading system under the 1947 General Agreement on Tariffs and Trade (GATT, which became the WTO in 1995) was one of America’s crowning achievements after World War II. The system works precisely because members willingly commit themselves to open, rules-based trade policies. Among other things, this ensures that foreign traders have the same rights as domestic nationals when disputes between them arise, and that the principle of nondiscrimination among trading partners prevails, except in the case of preferential trading arrangements. Trade flourished under the GATT, with the US leading negotiations for multilateral tariff reductions and the removal of other trade barriers (including quantitative restrictions). In later years, developing countries witnessed the success of open markets and decided to start dismantling their own highly protectionist regimes. For most, this resulted in a remarkable acceleration of growth in output and trade. For more than a half-century, world trade grew roughly twice as fast as world GDP. This growth was far from smooth, of course. Significant slowdowns followed the oil shocks of the 1970s, the Asian financial crisis of the late 1990s, and the Great Recession a decade later. Growth in world output and trade has resumed since the 2008 global financial crisis, but not as rapidly as in the years preceding it. And China, following an overhaul of its trade policies in the 1990s and its accession to the WTO in 2001, emerged as the world’s largest trading power. In addition to reducing domestic poverty and improving living standards for its own population, China’s dramatic economic ascent was bound to raise issues with other countries. **But thanks to the WTO and its dispute-settlement mechanism, there was a multilateral forum where these issues could be addressed – that is, until Trump came along.** Although **Biden** has reasserted America’s commitment to internationalism and multilateralism, he **has moved slowly to repair the damage that Trump did to critical institutions like the WTO.** Nor has Biden reversed Trump’s withdrawal from the TPP. Now called the Comprehensive and Progressive Agreement for Trans-Pacific Partnership, US membership in this 11-country pact would be a boon for US exporters. Currently, US companies are at a distinct disadvantage relative to their competitors in CPTPP countries, because their exports to those economies are subject to duties that do not apply to exports from members of the bloc. Biden also has not ended the trade war with China, even though that effort has utterly failed to achieve its stated objectives. While the US bilateral trade deficit with China has fallen somewhat, the deficits with Vietnam, Malaysia, and others have risen commensurately as their exports have replaced those from China. Although the Biden administration has finally agreed to a new director-general for the WTO, it has done little to reduce Trump’s tariffs, and has even announced that it will strengthen “buy American” provisions in government procurement contracts. Biden says he wants to protect American jobs, yet the Trump administration’s tariffs on imported iron and steel, which have cost a net total of around 75,000 jobs (leaving out the additional losses caused by other countries’ retaliatory tariffs), remain in place. If Biden really wants to help American workers, he should recognize that exports create good jobs, and that the export sector’s contribution to US GDP has doubled as a result of open multilateral trade. As for America’s current-account deficit, that can be addressed only by curtailing US expenditures relative to income, not through protectionism. And because the WTO procurement agreement has led other countries to open up government bidding processes for American exporters, it is doubtful that weakening it will benefit American workers; indeed, doing so may even cost jobs. China is here to stay. Though there are certainly trade issues that need to be addressed, that is best done multilaterally. The US and China have both lost as a result of the trade war. A US offer to remove the tariffs if the Chinese reciprocate and join multilateral discussions on outstanding issues could benefit both countries and the rest of the world. Strong economies make for successful countries. Efforts to protect domestic industries are a sign of weakness, not strength. If the Biden administration wants to achieve its stated goals, it will remove Trump’s protectionist measures, work multilaterally, strengthen US infrastructure, invest in workforce skills and education, and expand America’s research capabilities. **It should be obvious by now that continuing the last administration’s trade policies is a recipe for failure.**

#### Trade is irrelevant for war

Katherine Barbieri 13, Associate Professor of Political Science at the University of South Carolina, Ph.D. in Political Science from Binghamton University, “Economic Interdependence: A Path to Peace or Source of Interstate Conflict?” Chapter 10 in Conflict, War, and Peace: An Introduction to Scientific Research, google books

How does interdependence affect war, the most intense form of conflict? Table 2 gives the empirical results. The rarity of wars makes any analysis of their causes quite difficult, for variations in interdependence will seldom result in the occurrence of war. As in the case of MIDs, the log-likelihood ratio tests for each model suggest that the inclusion of the various measures of interdependence and the control variables improves our understanding of the factors affecting the occurrence of war over that obtained from the null model. However, the individual interdependence variables, alone, are not statistically significant. This is not the case with contiguity and relative capabilities, which are both statistically significant. Again, we see that contiguous dyads are more conflict-prone and that dyads composed of states with unequal power are more pacific than those with highly equal power. Surprisingly, no evidence is provided to support the commonly held proposition that democratic states are less likely to engage in wars with other democratic states.¶ The evidence from the pre-WWII period provides support for those arguing that economic factors have little, if any, influence on affecting leaders’ decisions to engage in war, but many of the control variables are also statistically insignificant. These results should be interpreted with caution, since the sample does not contain a sufficient number wars to allow us to capture great variations across different types of relationships. Many observations of war are excluded from the sample by virtue of not having the corresponding explanatory measures. A variable would have to have an extremely strong influence on conflict—as does contiguity—to find significant results. ¶ 7. Conclusions This study provides little empirical support for the liberal proposition that trade provides a path to interstate peace. Even after controlling for the influence of contiguity, joint democracy, alliance ties, and relative capabilities, the evidence suggests that in most instances trade fails to deter conflict. Instead, extensive economic interdependence increases the likelihood that dyads engage in militarized dispute; however, it appears to have little influence on the incidence of war.

#### Trade wars don’t go to hot wars

**Dayen 17**, New Republic contributor (David “Trump Is Signaling a Trade War, but It’s Not as Disastrous as You May Think”, https://www.thenation.com/article/trump-is-signaling-a-trade-war-but-its-not-as-disastrous-as-you-may-think/)

Can Trump enact tariffs on his own? Though it would appear to contradict the Origination Clause of the Constitution, Congress has delegated that authority in enough pieces of legislation that Trump could probably raise import duties unilaterally. But what would be the practical effect? Hard-core free traders paint a picture of cataclysm. Tariffs will launch trade wars, increase prices, and destroy the economy. This is all hard-wired into the pro-globalization worldview. Thomas Friedman once famously admitted that he wrote a column supporting a free-trade agreement with Central America without knowing a thing about it: “I just knew two words: free trade,” he told an audience. Presumably the opposite is true for Friedman: He sees one word, “tariff,” and immediately screams in horror. Oddly, many of those same proponents of free trade favor a policy that looks very much like a tariff. The Republican corporate-tax revamp includes something called a border-adjustment tax, which would impose a 20 percent tax on imports while eliminating a tax on exports. Like with tariffs, the goal appears to be to encourage domestic production. In fact, the tax would be much higher than the 5-10 percent tariff being floated. (It also might be illegal under the current global trade regime.) Supporters of border adjustment, particularly economists, argue that it will end up trade neutral, because the exchange rate will fluctuate in response to the tax. In other words, though the tax would make American-made goods more attractive, the value of the dollar would increase, leveling that out. Few of these economists seem to carry over the same analysis to the effects of a tariff. I don’t understand why. There’s no reason to doubt the fact that, if Trump imposed an across-the-board tariff, the dollar would strengthen, thus nullifying the desired effect. Indeed, before Trump has even taken office, the dollar has risen to a 14-year high, in anticipation of a more protectionist stance. Incidentally, for all the one-off announcements by Trump (however factually challenged) about hundreds of jobs he has allegedly rescued here or there, this one development—the rise in the dollar—has likely caused the loss of hundreds of thousands of manufacturing jobs, under standard economic theory. Looked at this way, higher tariffs wouldn’t cause a recession (as Paul Krugman has acknowledged), but would be somewhat pointless, with currency exchanges shifting to account for any changes. Trade wars might temporarily reduce efficiency, as domestic supply chains would have to be rebuilt, but they’re unlikely to radically alter the balance of trade on their own. There are other variables here. Importers and exporters who have lived in a world of floating exchange rates for decades may be fairly nimble in adjusting to them. On the downside, Krugman explains that raising tariffs could inhibit capital flows, meaning that investors will place less money into US markets. You can see how that might reduce economic growth. But Jeff Spross points out that America currently has a problem with too much foreign money flowing in; reducing the flow could arguably make the economy more stable. Trump could also seek to prevent unlawful currency manipulation (not necessarily from China, but from other Asian nations) that artificially disadvantages US manufacturing. The real unknown here is what Trump would do with all that tariff revenue. The border adjustment tax at 20 percent is assumed to bring in $1 trillion over the 10-year budget window. So a tariff of even one-quarter or one-half that size would draw significant funds. What’s the plan for it? Would it get plowed into job-creating investments? Tax cuts for the wealthy? That’s a significant variable as well. We do know that the same pundits who confidently predicted that globalization would be a win-win policy for America repeatedly got it wrong. Those on the losing side saw their jobs shipped out and factories closed down, and weren’t given the kind of assistance needed to offset the disruption. So it’s worth being a little skeptical of the warnings coming from the same corners now. I don’t have a ton of faith in the Trump team to necessarily make their trade agenda work (especially as corporate interests will seek to co-opt the redesigned policies in ways even friendlier to their bottom line). And I think there are smarter ways to balance our trade deficit than a tariff strategy which will just run up against currency exchange rates. But the hysteria accompanying these tariffs (which wasn’t at all present when President Obama imposed his own tariffs on Chinese tires and steel) seems far beyond what little we can assume about the actual results of such a strategy.

### 1NC – Developing Economies

#### Restricting IP protections undermines innovation and profit margins – turns case by precluding vaccine distribution to developing countries.

Cueni 12/10 [(Thomas, Director General of IFPMA, chair of the AMR Industry Alliance, Industry Co-Chair APEC Biopharmaceutical Working Group on Ethics, MA in politics from the London School of Economics) “The Risk in Suspending Vaccine Patent Rules,” New York Times, 12/10/2020] TDI

It is unclear how suspending patent protections would ensure fair distribution. But what is clear is that if successful, the effort would jeopardize future medical innovation, making us more vulnerable to other diseases.

Intellectual property rights, including patents, grant inventors a period of exclusivity to make and market their creations. By affording these rights to those who create intangible assets, such as musical compositions, software or drug formulas — people will invent more useful new things.

Development of a new medicine is risky and costly. Consider that scientists have spent decades — and billions of dollars — working on Alzheimer’s treatments, but still have little to show for it. The companies and investors who fund research shoulder so much risk because they have a shot at a reward. Once a patent expires, generic companies are free to produce the same product. Intellectual property rights underpin the system that gives us all new medicines, from psychiatric drugs to cancer treatments.

In trying to defend these rights, the drug industry has made mistakes in the past that have lost people’s trust. More than 22 years ago, for example, a group of drug companies sued the South African government for trying to import cheaper anti-AIDS drugs amid an epidemic. With price standing between patients and survival, the suit, which the companies eventually dropped, was a terrible misjudgment. The current situation is not parallel.

Several major drug companies, including AstraZeneca, GlaxoSmithKline and Johnson & Johnson, have pledged to offer their vaccines on a not-for-profit basis during the pandemic. Others are considering differential pricing for different countries. As of last month, four major pharmaceutical companies had already agreed to eventually produce at least three billion vaccine doses for low- and middle-income nations, according to one analysis.

In South Africa and India, pharmaceutical companies are already working with local partners to make their vaccines available. Johnson & Johnson has entered into a technology transfer partnership for its candidate vaccine with South Africa’s Aspen Pharmacare, and AstraZeneca has reached a licensing agreement with the Serum Institute of India to develop up to 1 billion doses of its vaccine for low and middle-income countries.

Companies can afford to license patents for free, or sell drugs at cost, precisely because they know that their intellectual property will be protected. That’s not a flaw in the system; it’s how the system ensures that pharmaceutical research will continue to be funded.

#### IP protections are key to pharmaceutical investment in developing countries.

Ezell and Cory 19 [(Stephen, vice president, global innovation policy, at the Information Technology and Innovation Foundation, B.S. from the School of Foreign Service at Georgetown University, and Nigel, associate director covering trade policy at the Information Technology and Innovation Foundation, former researcher in the Southeast Asia Program at the Center for Strategic and International Studies, MA in public policy from Georgetown University) “The Way Forward for Intellectual Property Internationally,” Information Technology and Innovation Foundation, 4/25/2019] TDI

Academic research also signals a strong correlation between IPR and technology transfer. Lippoldt showed that IPR strengthening in countries—particularly with respect to patents—is associated with increased technology transfer via trade and investment.34 Research has revealed that a country’s level of intellectual property protection considerably affects whether foreign firms will transfer technology into it.35 That matters because the welfare gains from the importation of technology via innovative products, while differing across countries, can be substantial.36 For instance, foreign sources of technology account for over 90 percent of domestic productivity growth in all but a handful of countries.37 The research on this matter is clear and consistent. For example, a 1986 United Nations Conference on Trade and Development (UNCTAD) study found that direct investment in new technology areas such as computer software, semiconductors, and biotechnology is supported by stronger intellectual property rights policy regimes.38 (However, as this report later clarifies, subsequent UNCTAD reports have lamentably taken a more skeptical view toward IP.) A 1989 study by the United Nations Commission on Transnational Corporations (UNCTC) found that weak IP rights reduce computer software direct investment; and a 1990 study by UNCTC found that weak IP rights reduce pharmaceutical investment.39 Mansfield conducted firm-level surveys and found that perceptions of strong IP rights abroad have a positive effect on incentives to transfer technologies abroad. Likewise, survey research by the World Bank’s International Finance Corporation found that, with variations by sector, country, and technology, at least 25 percent of American and Japanese high-tech firms refuse to directly invest, or enter into a joint venture, in developing countries with weak intellectual property rights; and a later study confirmed those survey findings with actual foreign direct investment data.40 And an Institute for International Economics study of World Bank data concluded that weak intellectual property rights reduce flows of all these commercial activities, regardless of nations’ levels of economic development.41

Studies have also shown how the benefits of intellectual property extend to developing countries. Diwan and Rodrik demonstrated that stronger patent rights in developing countries give enterprises from developed countries a greater incentive to research and introduce technologies appropriate to developing countries.42 Similarly, Taylor showed that weak patent rights in developing countries lead enterprises from developed countries to introduce less-than-best-practice technologies to developing countries.43 Interestingly, the relationship goes in both directions. Branstetter and Saggi showed that strengthened IPR protection not only improves the investment climate in the implementing countries, but also leads to increased FDI in the country producing the original innovation.44 They concluded that IPR reform in the “global South” (e.g., developing countries) may be associated with FDI increases in the “global North” (e.g., developed countries). As northern firms shift their production to southern affiliates, this FDI accelerates southern industrial development, creating a cyclical feedback mechanism that also benefits the North. Another study by Liao and Wong, which focused on firm-level analysis, highlights the inter-relationship of IPR reform in developed and developing countries. Their study concluded that developing countries can entice technology transfer from the North by providing IPR protection for incoming products (although they note there is a need for redoubled R&D efforts in developed countries to spur needed innovations).45

#### A wholesale solution is key---the aff fails.

Stone 21. [(Judy Stone is an Infectious Disease specialist) “Covid Vaccine Equity - Developing Countries Need Our Help,” Forbes, May 11, 2021. <https://www.forbes.com/sites/judystone/2021/05/11/vaccine-equitydeveloping-countries-need-our-help/?sh=10939a363ec8>] TDI

The real problem is that vax is a good retail (one at a time) solution, whereas **in a pandemic you need a wholesale, behavioral semi-solution: masks, ventilation, quarantine.** With its nationalistic approach to global problems the previous administration brokered deals that prohibited donation of supplies, in part due to liability concerns of the manufacturers or shortages of raw materials. There has been a **great deal of debate over whether we should waive intellectual property rights**, given the urgency of the Covid pandemic. Some in industry feel it will stifle their innovation. Others reply that public and non-profits have provided over $10 billion towards research and development of vaccines. Furthermore, the U.S. government holds the patent for a technique for modifying the coronavirus protein used in vaccines produced by the major U.S. manufacturers. Unlike his predecessor, President Biden understands that sharing vaccine with other countries is also in our best interest, and joined the international Covax program. Covax is led by WHO, Gavi (Global vaccine alliance), CEPI (Coalition for Epidemic Preparedness Innovations) and the UN’s Children’s Fund (UNICEF). So far, only 0.3% of the vaccines that have been administered have gone to low-income countries, according to the Director-General of the World Health Organization (WHO) Tedros Adhanom Ghebreyesus. Covax’s goal is vaccinating 20% of the population of poorer countries. Covax had hoped to administer 2 billion vaccine doses in 2021 (that’s more than 25% of the world’s whole population); so far, they’ve only reached 29 million doses. We need at least a 70% vaccination rate to develop herd immunity and stop the pandemic. Another problem is that even if the patent protections are waived, allowing companies to have the “recipe” for producing vaccines, many **lack the technical know-how or experience to do so.** WHO is proposing a technology transfer hub to assist in this process.

#### Alt Cause- Overreliance on vaccines hurts overall pandemic response.

Lovelace 1/13 [(Berkeley, health-care reporter for CNBC, mainly covering pharmaceuticals and the Food and Drug Administration) "WHO says Covid vaccines aren’t ‘silver bullets’ and relying entirely on them has hurt nations," CNBC, 1-13-2021, https://www.cnbc.com/2021/01/15/who-says-covid-vaccines-arent-silver-bullets-and-relying-entirely-on-them-has-hurt-nations.html] TDI

The World Health Organization said Friday that [coronavirus](https://www.cnbc.com/2021/01/15/coronavirus-live-updates.html) vaccines aren’t “silver bullets” and relying solely on them to fight the pandemic has hurt nations. Some countries in Europe, Africa and the Americas are seeing spikes in Covid-19 cases “because we are collectively not succeeding at breaking the chains of transmission at the community level or within households,” WHO Director-General Tedros Adhanom Ghebreyesus said during a news conference from the agency’s Geneva headquarters. With [global deaths reaching 2 million](https://www.cnbc.com/2021/01/15/coronavirus-live-updates.html) and new variants of the virus appearing in multiple countries, world leaders need to do all they can to curb infections “through tried and tested public health measures,” Tedros said. “There is only one way out of this storm and that is to share the tools we have and commit to using them together.” The [coronavirus](https://www.cnbc.com/coronavirus/) has infected more than 93.3 million people worldwide and killed at least 2 million since the pandemic began about a year ago, according to data compiled by Johns Hopkins University. The virus continues to accelerate in some regions, with nations reporting that their supply of oxygen for Covid-19 patients is running “dangerously low,” the WHO said. Some countries, including the U.S., have focused heavily on the use of vaccines to combat their outbreaks. While vaccines are a useful tool, they will not end the pandemic alone, Mike Ryan, executive director of the WHO’s health emergencies program, said at the news conference. “We warned in 2020 that if we were to rely entirely on vaccines as the only solution, we could lose the very controlled measures that we had at our disposal at the time. And I think to some extent that has come true,” Ryan said, adding the colder seasons and the recent holidays also may have also played a role in the spread of the virus. “A big portion of the transmission has occurred because we are reducing our physical distancing. ... We are not breaking the chains of transmission. The virus is exploiting our lack of tactical commitment,” he added. “We are not doing as well as we could.” Dr. Bruce Aylward, a senior advisor to the WHO’s director-general, echoed Ryan’s comments, saying, vaccines are not “silver bullets” “Things can get worse, numbers can go up,” he said. We have vaccines, yes. But we have limited supplies of vaccines that will be rolled out slowly across the world. And vaccines are not perfect. They don’t protect everyone against every situation.” In the U.S., the pace of vaccinations is going slower than officials had hoped. As of Friday at 6 a.m. ET, more than 31.1 million doses of vaccine had been distributed across the U.S., but just over 12.2 million shots have been administered, according to data compiled by the Centers for Disease Control and Prevention. Meanwhile, cases are rapidly growing, with the U.S. recording at least 238,800 new Covid-19 cases and at least 3,310 virus-related deaths each day, based on a seven-day average calculated by CNBC using Johns Hopkins data. On Thursday, President-elect Joe Biden [unveiled a sweeping plan](https://www.cnbc.com/2021/01/14/biden-unveils-sweeping-plan-to-combat-the-covid-pandemic-in-the-us.html) to combat the coronavirus pandemic in the United States. While his administration will invest billions in a vaccine campaign, it will also scale up testing, invest in new treatments and work to identify new strains, among other measures.