# 1NC

## Cap K

### 1NC [4:28]

#### While on the surface the aff seems anti-corporate, their advantages are designed to paper over the faults of neoliberalism and protect capital on a broader scale.

#### L: The aff’s faith in market logics allows for rampant international austerity and privatization of healthcare – this is a tradeoff DA that outweighs and turns case.

Sell and Williams, 20

[Susan K., School of Regulation and Global Governance @ The Australian National University, Political Science @ George Washington University; and Owain D., University of Queensland, Public Health: “Health under capitalism: a global political economy of structural pathogenesis,” Review of International Political Economy, 27:1 (2020), 1-25, DOI: 10.1080/09692290.2019.1659842]//AD

More recently, economic crises have (re-)inspired neoliberal governance responses to health and rejuvenated the authority of the International Monetary Fund (IMF) (De Vogli, Marmot, & Stuckler, 2013; De Vogli & Birbeck, 2005; Farmer, 2003; Rowden, 2013; Schrecker, 2016a; Stuckler & Basu, 2013) The IMF has acted with revitalized authority to force sharp reductions in spending on health services and salaries in new debtor states, with decisions often backed and facilitated by the EU (Kentikelenis, 2017). In Greece, in the face of the euro crisis, hospital budgets were cut by 40% with 26,000 public health workers’ jobs at risk (Kentikelenis et al., 2011, p. 1457). While mixed national health systems are common in many countries, the state often remains as a stubborn presence and health care provider. Yet governments and multilateral organizations repeatedly emphasize the appeal of private insurers and the private sector as health care providers. Neoliberalism and its implications for health governance are evident in structural adjustment and austerity policies adopted in the wake of debt and financial crises when health budgets are starved to make banks whole (Clark & Heath, 2014; Mooney, 2012; Stuckler & Basu, 2013). Austerity measures in the wake of financial crises in Latin America and South East Asia, and the global financial crisis of 2008 put pressure on publicly funded national health systems. States have responded, either willingly or not, with divestment in health and the opening up the sector to market forces. In some cases, such as the UK, the resultant phases of health service privatization and rolling back of social insurance systems proceed in a piecemeal fashion from non-core services to the heart of the public system, and with attacks on publicly supported financial risk pooling or progressive tax transfers to those in need of health assistance (Pieper, 2018). Policymakers tout the market as a more efficient means of allocating scarce resources for health. There are substantial profits to be made both out of the public purse in collaborative financial and investment relations with the state for health projects, as is the case with the often highly subsidized Public Private Partnerships and Public Private Investment deals in many European countries (Lanas, 2016; Roehrich, Barlow, & Wright, 2014). Multiple economic interests are at play in privatization and state rollbacks; the market for health is substantial, and health related economic sectors are often hugely profitable. In developing countries, health service firms and private insurers are penetrating burgeoning middle class markets and cherry picking which health services are provided privately (Jasso-Aguilar, Waitzkin, & Landwehr, 2005)). Finally, many of the orthodoxies associated with neoliberalism continue to shape and constrain health policy and regulation, with spending on public health and services attenuated in many countries since the 2008 global financial crisis (Brumby & Verhoeven, 2010). Despite contestation and the presence of welcome alternative policy pathways, we risk neglecting structural and political economic drivers, including economic ideologies, as powerful and often dominant logics operating in and influencing that governance system.

#### L: (WTO Spec.) The WTO is inevitably a tool of accumulation for capitalist imperialism – international institutional monopoly capitalism overdetermines the plan’s move to peace – causes war, environmental degradation, and extinction.

Cuong, 18

[Vu Manh, Researcher @ VietEra Foundation: “International institutional monopoly capitalism and its manifestations,” published by Monthly Review on December 19, 2018. https://www.researchgate.net/profile/Cuong-Vu-10/publication/331162082\_International\_institutional\_monopoly\_capitalism\_and\_its\_manifestations/links/5c6c2588299bf1e3a5b62764/International-institutional-monopoly-capitalism-and-its-manifestations.pdf]//AD

\*IIMC=International Institutional Monopoly Capitalism

The Evolution of Monopoly Capitalism Monopoly capitalism emerged from “laissez-faire” capitalism in the late nineteenth and early twentieth centuries, as described clearly by V.I. Lenin in Imperialism, the Highest Stage of Capitalism, allowing giant corporations to dominate the accumulation process. Since the late 1970s, especially since the collapse of the Soviet Union, this system has reached a new level in its development, forging imperial centralism or “International Institutional Monopoly Capitalism” (IIMC), whereby a handful of powerful nation-states explicitly use international organizations to impose their interests and further expand accumulation. Figure 1 presents a brief overview of the conceptualization of capitalism throughout its history, focusing on the development of monopoly capitalism from the 1870s to the present, including both economic and politic facets. It includes IIMC as the newest term in the evolution of monopoly capitalism. (2) (3) (4) (5) As Karl Marx noted, capitalism has an inherent drive toward endless accumulation through the production of “surplus value.” In relation to this defining characteristic of the system, there have been distinct historical configurations of its operation. IIMC represents the highest form of the imperialism stage of capitalism, given the increasingly coordination between the monopoly capital and the state within core nations. As a state-formed monopoly capitalism, IIMC has been forcing most economies to participate in its system, regardless of whether those economies are capitalist or socialist (except North Korea). This is what Nikolai Bukharin pointed to a century ago. According to Samir Amin, in the globalization era, the efficiency of economic management by nation-states has changed. Under IIMC, advanced capitalist states are even stronger, as far as their economic-political reach, and are able to control international institutions and organizations. Within these core nations, the state uses its strength to support the formation of “supercompanies” (the multinational corporations that monopolize one or a number of products/services worldwide), serving the interests of the richest class, while bringing some additional benefits to its broader population. These countries are monopoly nations. Through international institutional settings (e.g., World Bank, International Monetary Fund, World Trade Organization), monopoly capital and monopoly nations extend their influence and power into every corner of the world, even the few remaining socialist strongholds, causing complex conflicts within globalization and regionalization processes. Capital Concentration and the Establishment of Monopoly Nations Capital accumulation and the centralization and concentration of capital led to the formation of monopolies (cartels, syndicates, trusts, consortiums, and conglomerates). This fundamental law of capitalism continues to take effect in the IIMC period, albeit at a very high level. However, the following organic processes contributed to the formation of monopoly nations: 1. The concentration and centralization of capital in super-companies: The increasing strength and expansion of super-companies, especially over the last five decades, have advanced economic internationalization and globalization. Globally, the 500 largest companies generated $31.1 trillion in 2014. They accounted for nearly 40 percent of world income –up 20 percent from less than 20 percent in 1960. Super-companies not only have a monopoly within one country’s borders but also are dominant in other countries worldwide. The overseas assets of the world’s 100 largest non-financial super-companies in 2011 accounted for 63 percent of their total assets, whereas foreign sales reached 65 percent of their total. This is reflected in the intensification of foreign direct investment (FDI); the significant transfer of employment, technology and international financial operations; and the strong rise of financial systems, bank credit, and insurance. Many super-companies with powerful finances (assets, revenues) can far exceed the gross domestic product (GDP) of many economies. For example, Procter & Gamble (ranked 100 in the list of the largest companies), as noted in Table 1,has revenues that are higher than the GDP of Oman,which is the largest economy in a group of 124 smalland medium-sized economies, with $81.8billion in 2014. Supercompanies can dramatically influence small and/or poor countries as they pressure governments to condone environmental degradation, violation of national labor laws, and abuse of labor rights. They can force these governments to tender incentives, which maximize their profits by allowing extremely poor working conditions and low wages. Some super-companies actively destroy local agriculture and kill marine life, which has sparked mass protests. They often hire military personnel to open fire on peaceful protestors and make assassinations. 2. The mass exploitation of workers: The division of labor extends throughout the world. In 2011, the employment of foreign affiliates worldwide reached sixty-nine million jobs, up by 8 percent from 2010. Specifically, the total number of employees of the ten largest companies worldwide in 2014 exceeded 9.8 million, which is more than the population of many independent nations.  This international division of labor is a product of monopoly capitalism, seeking to avoid the “law of declining rate of profit” and striving to increase the rate of profit. John Bellamy Foster and John Smith have clearly presented this trend, using archetypical examples of the labor and production associated with iPhones, T-shirts, and coffee, which involve super-exploitation overseas by super-companies. As a result, over the last three decades, an enormous amount of surplus value has been produced in the periphery, but captured by super-companies within monopoly nations. Through the international division of labor and expansion of branches worldwide, super-companies promote alliances in the form of complex cooperation among themselves and between themselves and small- and medium-sized companies. They adopt a “divide and rule” approach to control labor worldwide. These super-companiestake advantage of the economies of scale to increase their market shares and influence. Once they are in place in peripheral countries, they influence habits and traditional customs. Workers re-align themselves to earn a living wage. 3. The symbiotic growth of monopoly nations and super-companies: Both the state and capital rely on each other to exploit existing internal natural resources (e.g., OECD with its oil); control major production resources throughout the world (e.g., the United States in regard to Iraq’s oil, China influence on its neighbors’ sea routes and exclusive economic zone in the East and South China Seas); and possess key technologies, such as weapons, cell cloning, artificial intelligence robots, patent medicine develop, or media and communication. In other words, monopoly nations are the products of “five monopolies.” Super-companies and monopoly nations exert their technological and economic powers to dominant the world market, leading to both positive and negative impacts. Super-companies like capitalists to have control over mass destructive weapons, in order to defeat competitors and to destroy commoners’ benefits. The first and most outstanding monopoly nation is the United States, which has only two companies that reached a turnover in excess of $5 billion in 1955: General Motors ($9.82 billion) and Exxon Mobil ($5.66 billion). However, by 1990, the number of large companies (over $5 billion of turnover) had reached more than 100. In 2013, the smallest company (Exelon: energy sector) of the 132 largest companies had a turnover of $23.5 billion. On a global scale, the company that has the lowest ranking in the top 500 list of largest companies (ranked by Fortune in 2013) is Ricoh (office-equipment sector), reaching sales of over $23.2 billion. Also included in this list are eighty-nine companies from China, which is a rapid increase, compared to its thirty-four companies in 2008. As of 2015, the Global 500 are represented by 36 countries, but nearly 472 of the Global 500 are from only 16 countries: Canada, the United States, France, Germany, Italy, the Netherlands, Switzerland, the United Kingdom, China, Japan, South Korea, Taiwan, Australia, Brazil, India, and Russia. Of these 16 countries, 13 are the world’s largest economies. Table 2 lists the typical monopoly nations in the world in 2015. The combining of super-companies and states that Lenin analyzed nearly 100 years ago, in which capitalists pivot around political agencies and monopolies, led to the integration of monopoly nations and international institutions/organizations. Thus, under the conditions of IIMC, this integration has crucially influenced the globalization process of the world economy, specifically for the peripheral countries. Although these monopoly nations dominate at different levels and their income is not equivalent, they do not conquer other nations; nonetheless, they help transfer a vast surplus of value from peripheral countries into the core countries. Monopoly Nations Monopolize International Institutions The rise of super-companies has not meant the end of competition, which is globally more intense today than ever before. Simultaneously, monopoly nations do not displace super-companies or prevent their monopolistic power; on the contrary, these states directly and indirectly provide super-companies with advantages and benefits. As Harry Braverman explained, “the state is guarantor of the conditions, the social relations, of capitalism, and the protector of the ever more unequal distribution of property.” The role of the state has changed in monopoly nations: it not only regulates the domestic economy, exploits the state capital, and protects monopolies on the international market, but it also represents and supports the allies of domestic monopolies to affect the activities of international institutions/organizations in its favor and increase its competitiveness. The role of the state and its various imperial alliances with local politicians is facilitated through the discourse of national and international competitiveness. Thus, the rise of monopoly nations has not killed competition in all of its forms. In fact, rivalry is more frequent and fierce between monopoly nations and other economies. The formation of monopoly nations and the emergence of a number of new industrialized countries have caused problems for individual economies to address and settle the issues related to international economic activities. For example, the legal systems and the legal provisions of nations have become a barrier to the circular flow of resources and limited the mobilities of the supercompanies. These can range from the agricultural protection policies that were severely opposed by the Cairns Group at the Uruguay Round in 1986 (the first time developing countries had played an active role) to the restriction regulations in immigration. They are also associated with cultural or political issues such as Internet censorship in China, Euroscepticism trend in European Union and Brexit in the United Kingdom, the opposition of the Trans-Pacific Partnership (TPP), and new protectionism in the United States. Meanwhile, the international institutions had just proved their consistency in their role of coordination and international arbitration among new member economies in the beginning phase. Subsequently, the competitiveness among countries has moved to a higher level and continued to increase, which manifested itself in many forms such as disputes of commerce, technology, and finance, etc. The recent disputes include: batteries (solar) between the United States and India; beef among the United States, Indo, and Japan; steel pipes between Japan and China; auto parts between the United States and China; catfish, frozen shrimp, and garments between Viet Nam and the United States; and rare earths among the United States, the European Union, Japan, and China. There is a severe conflict among the United States, the European Union, Ukraine, and Russia on the recent issue of annexing Crimea. Since its establishment, the World Trade Organization has witnessed many disputes over dumping, anti-subsidy, and safeguarded trade among member economies. Most of these arguments are related to monopoly nations. The number of quarrels is growing rapidly: over the last twenty years in particular, the World Trade Organization has had to resolve hundreds of cases. Specifically, the United States is a typical monopoly nation that is associated with the majority of the commercial disputes in the world (344 cases), followed by the European Union (316 cases), Japan (180 cases), and China (155 cases). In the context of the multitude of interlocking and complicated disagreements, the dispute settlement mechanism of World Trade Organization constitutes the basic cornerstone maintaining the multilateral trading order. However, monopoly nations have been controlling this mechanism. If there are disputes among the strongest monopoly nations, this makes them direct competitors (these include the United States, Japan, Western Europe, Russia, and China). Thus, monopoly nations tend to compromise and align with others to monopolize the World Trade Organization. Otherwise, super-companies always plan well to avoid a devalued competition. In the case of Ford, Toyota, and the other leading auto firms, the companies did not try to undersell each other in their prices. Instead, they competed for the low-cost position by making reductions in prime production (labor and raw material) costs that could be implemented in peripheral regions. Monopoly nations monopolize not only the World Trade Organization but also other international institutions/organizations or forums, such as the World Bank, International Monetary Fund, and regional banks. Furthermore, monopoly nations monopolize political forums like G-7, the European Union, and even the most powerful United Nations. Monopoly nations also monopolize most other regional organizations, from Asia-Pacific Economic Cooperation to the Organization of Petroleum Exporting Countries to the North Atlantic Treaty Organization and most recent the Asian Infrastructure Investment Bank. Below is a list of typical international institutions/organizations and mechanisms that the monopoly nations are monopolizing: • United Nations: Founded in 1945, it was monopolized at its founding by the five permanent members of the United Nations Security Council. These five members not only have the responsibility to maintain international peace and security in accordance with the principles and purposes of the United Nations but also have the power to veto, thus enabling them to oppose or prevent any proposed resolution of the other members. As a rule, as these five members become stronger, the United Nations is weaker. The weakness of the United Nations is expressed not only in the handling of the South China Sea dispute, but also in events such as Ukraine’s political crisis, the East China Sea quarrels, and its ability to eliminate wars and serious conflicts since the fall of Soviet (31) (32) (33) MR Online | International institutional monopoly capitalism and its manifestations Page 8 of 26 https://mronline.org/2018/12/19/international-institutional-monopoly-capitalism-and-… 07/01/2019 Union, specifically wars for economic purpose. For instance, the U.S. war machine engaged in Afghanistan (2001-14) and Iraq (2003-11); the Russia annexation of Crimea (2014); and the threat of a Chinese war in the South China Sea. The key motivation of the current aggressive and strongest monopoly nations is to gain control over vital strategic resources. • World Bank: Founded in 1944, an international institution was originally dominated by the United States and the United Kingdom. The domination of monopoly nations is evident in the voting rights of the member economies in the World Bank. Of the members, in 2013 the United States had highest voting rights at 17.69 percent, followed by Japan (6.84 percent), China (4.42 percent), Germany (4.00 percent), the United Kingdom (3.75 percent), and France (3.75 percent). • International Monetary Fund: Established in 1944, the International Monetary Fund’s funding is contributed by the member economies. Since its inception, the United States has always been the largest contributor (17.69 percent) and has been dominant through the majority of the voting rights, followed by other members with large holdings in 2010, such as Japan (6.56 percent), Germany (6.12 percent), the United Kingdom (4.51 percent), France (4.51 percent), and China (4.00 percent). • World Trade Organization: The World Trade Organization was established in 1995 to replace the General Agreement on Tariffs and Trade that had been in effect since 1948. Its mission is to eliminate or minimize trade barriers to free trade. The majority of its decisions are based on negotiation and consensus. However, the negotiation process does not always reach consensus among all of its members. This process is often criticized by many developing economies because they are not welcome in the negotiations and because, according to Richard Steinberg, the trade negotiations are actually promoted and end at a negotiating position that provides special benefit for the European Union and the United States. The formation of the regional institutions/organizations, the multilateral economic cooperation forums, and bilateral negotiations are an expression of the ever-increasing conflict between the regionalization and globalization processes. Such examples include the conflicts between the European Union and World Trade Organization on agricultural policy; between North American Free Trade Agreement and World Trade Organization on juridical and political issues; and between Organization of Petroleum Exporting Countries and World Trade Organization on oil price/supply management. These processes lead to very complicated overlapping and interlocking regional and international organizations because a monopoly nation can be a member of several organizations simultaneously. Thus, these organizations become the direct or indirect means to facilitate the monopoly nations in exploiting other countries. It is inevitable that the activities of powerful international institutions (such as the World Bank, International Monetary Fund, and World Trade Organization) have not really brought equal benefits to all. The IIMC built a complex called the “IMNs-United Nation: Specialized Agencies, International Institutions/Organizations, and Region Organizations” (IMNsInIs). This organization is beyond the scope of previous international institutions. In other words, the IIMC is a combination of the power of super-companies, monopoly nations, and the juridical capacity of the international institutions. Under IIMC, capital globalization has not only strengthened the power of monopoly nations but has simultaneously created the dependence of other states/nations on the world market and finance system, which are dominated by monopoly nations. This relationship among states/ nations reflects the development of monopoly nations at the expense of the peripheral regions. In addition, “IMNs-InIs” is different from “transnational capitalism class – transnational state” structure in quality, in which the former has instrumentalized the latter. In IMNs-InIs, the international organizations have progressively been the “instrumental institutions” in the hands of monopoly nations to favor them and hinder other economies. This is typically the case when the United Nations Security Council members impose sanctions against other nations, trumping any efforts that could weaken their veto power. It is true in how monopoly nations dominate the WTO through the Doha Development Agenda to hinder agricultural economies of peripheral countries. It is evident in how the International Monetary Fund serves wealthy countries but increases poverty and environmental degradation in poor countries. The establishment of the Beijing-based Asian Infrastructure Investment Bank has raised concerns for both the United States and Japan regarding whether the bank will have high standards of governance and safeguards, which will prevent damage to other creditors. The IIMC is the final stage of “state-formed monopoly capitalism,” the new form of capitalist production that maintains the existence of capitalism and adapts it to new historical conditions.

#### I: Our critique independently outweighs the case - neoliberalism causes extinction and massive social inequalities – the affs single issue legalistic solution is the exact kind of politics neolib wants us to engage in so the root cause goes unquestioned. Farbod 15

( Faramarz Farbod , PhD Candidate @ Rutgers, Prof @ Moravian College, Monthly Review, http://mrzine.monthlyreview.org/2015/farbod020615.html, 6-2)

Global capitalism is the 800-pound gorilla. The twin ecological and economic crises, militarism, the rise of the surveillance state, and a dysfunctional political system can all be traced to its normal operations. We need a transformative politics from below that can challenge the fundamentals of capitalism instead of today's politics that is content to treat its symptoms. The problems we face are linked to each other and to the way a capitalist society operates. We must make an effort to understand its real character. The fundamental question of our time is whether we can go beyond a system that is ravaging the Earth and secure a future with dignity for life and respect for the planet. What has capitalism done to us lately? The best science tells us that this is a do-or-die moment. We are now in the midst of the 6th mass extinction in the planetary history with 150 to 200 species going extinct every day, a pace 1,000 times greater than the 'natural' extinction rate.1 The Earth has been warming rapidly since the 1970s with the 10 warmest years on record all occurring since 1998.2 The planet has already warmed by 0.85 degree Celsius since the industrial revolution 150 years ago. An increase of 2° Celsius is the limit of what the planet can take before major catastrophic consequences. Limiting global warming to 2°C requires reducing global emissions by 6% per year. However, global carbon emissions from fossil fuels increased by about 1.5 times between 1990 and 2008.3 Capitalism has also led to explosive social inequalities. The global economic landscape is littered with rising concentration of wealth, debt, distress, and immiseration caused by the austerity-pushing elites. Take the US. The richest 20 persons have as much wealth as the bottom 150 million.4 Since 1973, the hourly wages of workers have lagged behind worker productivity rates by more than 800%.5 It now takes the average family 47 years to make what a hedge fund manager makes in one hour.6 Just about a quarter of children under the age of 5 live in poverty.7 A majority of public school students are low-income.8 85% of workers feel stress on the job.9 Soon the only thing left of the American Dream will be a culture of hustling to survive. Take the global society. The world's billionaires control $7 trillion, a sum 77 times the debt owed by Greece to the European banks.10 The richest 80 possess more than the combined wealth of the bottom 50% of the global population (3.5 billion people).11 By 2016 the richest 1% will own a greater share of the global wealth than the rest of us combined.12 The top 200 global corporations wield twice the economic power of the bottom 80% of the global population.13 Instead of a global society capitalism is creating a global apartheid. What's the nature of the beast? Firstly, the "egotistical calculation" of commerce wins the day every time. Capital seeks maximum profitability as a matter of first priority. Evermore "accumulation of capital" is the system's bill of health; it is slowdowns or reversals that usher in crises and set off panic. Cancer-like hunger for endless growth is in the system's DNA and is what has set it on a tragic collision course with Nature, a finite category. Secondly, capitalism treats human labor as a cost. It therefore opposes labor capturing a fair share of the total economic value that it creates. Since labor stands for the majority and capital for a tiny minority, it follows that classism and class warfare are built into its DNA, which explains why the "middle class" is shrinking and its gains are never secure. Thirdly, private interests determine massive investments and make key decisions at the point of production guided by maximization of profits. That's why in the US the truck freight replaced the railroad freight, chemicals were used extensively in agriculture, public transport was gutted in favor of private cars, and big cars replaced small ones. What should political action aim for today? The political class has no good ideas about how to address the crises. One may even wonder whether it has a serious understanding of the system, or at least of ways to ameliorate its consequences. The range of solutions offered tends to be of a technical, legislative, or regulatory nature, promising at best temporary management of the deepening crises. The trajectory of the system, at any rate, precludes a return to its post-WWII regulatory phase. It's left to us as a society to think about what the real character of the system is, where we are going, and how we are going to deal with the trajectory of the system -- and act accordingly. The critical task ahead is to build a transformative politics capable of steering the system away from its destructive path. Given the system's DNA, such a politics from below must include efforts to challenge the system's fundamentals, namely, its private mode of decision-making about investments and about what and how to produce. Furthermore, it behooves us to heed the late environmentalist Barry Commoner's insistence on the efficacy of a strategy of prevention over a failed one of control or capture of pollutants. At a lecture in 1991, Commoner remarked: "Environmental pollution is an incurable disease; it can only be prevented"; and he proceeded to refer to "a law," namely: "if you don't put a pollutant in the environment it won't be there." What is nearly certain now is that without democratic control of wealth and social governance of the means of production, we will all be condemned to the labor of Sisyphus. Only we won't have to suffer for all eternity, as the degradation of life-enhancing natural and social systems will soon reach a point of no return**.**

#### I: Cap makes global pandemics inevitable---causes extinction. TURNS case, aff plan only worsens disease and harms those you swore to aid.

**Krepinevich 9** (Andrew, President of the Center for Strategic and Budgetary Assessments and Distinguished Visiting Professor @ George Mason's School of Public Policy, Congressional Consultant on Military Affairs, PhD Harvard, "7 Deadly Scenarios," February)

Over the past several decades the world has experience a wave of globalization, far surpassing the great surge that swept over the globe in the years leading up to World War I. The growth of the world economy---facilitated by lower trade barriers, global supply chains, international financial networks, and global communication---has yielded many benefits, including increased wealth and great economic efficiencies. It has also yielded an unprecedented level of mobility---in the movement of capital, goods, and services, in people (including migration) , and last but not least, in disease. For nearly a century the world has been spared the specter of mass deaths induced by a killer disease. The last great global pandemic occurred at the end of World War I, when the misnamed Spanish influenza killed an estimated 20 million people---including nearly 700,000 Americans---before it ran its course. To a significant degree, the spread of influenza was aided and abetted by the world war, which saw the armed forces of many nations on the move from their home countries to other parts of the world. Even then, however, human mobility and trade were far more constrained than they are today, when every year millions of passengers pass through U.S. airports alone. There have been several canaries in humanity's mine shaft, warning of impending disaster. According to the scientific community, the world has been overdue for some form of pandemic. On occasions too numerous to count, members of the medical profession have stated that "it is not a matter of if such an event will occur, but when." As the World Health Organization met in Geneva in the summer of 2009, health officials were citing the "near-misses" the world had recently experienced with the AIDS virus, tuberculosis, and avian flu (commonly referred to as bird flu), and warned that, absent a major effort to improve the globe's public health system, humanity's good fortune could not---and would not---last. But the issue has to struggle to get on the global agenda. Here in America the 2008 presidential campaign (which began in early 2007) was dominated by the wars in Afghanistan and Iraq, the broader problem of militant Islam, rising energy prices, a falling economy, and growing concerns about global warming. Neither public health concerns over a pandemic nor the country's illegal alien problem appeared prominently on the political radar screen. Call them the "stealth" issues---the ones that we failed to detect.

**I: Capitalist growth makes war inevitable, which turns case. By supporting cap you exacerbate your war impacts.**

**Trainer, ’07** [Ted, Senior Lecturer in the School of Social Work at the University of New South Wales, “Renewable Energy Cannot Sustain A Consumer Society”, p. 125-159]

**If all nations go on trying to increase their wealth, production, consumption and "living standards" without limit in a world of limited resources, then we must expect increasing armed conflict.** **Rich-world affluent lifestyles require us to be heavily armed and aggressive, in order to guard the empire from which we draw more than our fair share of resources**. Many people within the Peace Movement fail to grasp that ***there is no possibility of a peaceful world while a few are taking far more than their fair share and the rest aspire to live as the rich few do***. **If we want to remain affluent we should remain heavily armed, so we can prevent others from taking "our" oil fields etc**. (For a detailed argument see Trainer, 2002.)

#### I/F: The role of the ballot is to resist neoliberal ideology – filter negative arguments through an epistemological dismantling of neoliberalism.

HAY & ROSAMUND, PhDs, 2002 (Colin and Ben, Journal of European Public Policy Volume 9, Issue 2, 2002 p. 3-5)

The implicit supposition which seems to underlie much of the sceptical or second-wave literature seeking to expose the ‘myth’ or ‘delusion’ of globalisation, is that a rigorous empirical exercise in demystification will be sufficient to reverse the tide of ill-informed public policy made in the name of globalisation. Sadly, this has not proved to be the case. For **however convinced we might be by the empirical armoury mustered against the hyperglobalisation thesis** by the sceptics, their **rigorous empiricism leads them to fail adequately to consider the way in which globalisation comes to inform public policy-making.** **It is here,** we suggest, that **the discourse of globalisation** — and the discursive construction of the imperatives it is seen to conjure along with attendant fatalism about the possibilities for meaningful political agency — **must enter the analysis**. For, as the most cursory reflection on the issue of structure and agency reveals, **it is the ideas actors hold about the context in which they find themselves** rather than the context itself **which informs the way in which they behave** (Hay 1999a, forthcoming a). **This is no less true of policy makers and governments**. **Whether** the **globalisation** thesis **is ‘true’** or not **may matter far less than whether it is deemed to be true** (or, quite possibly, just useful) **by those employing it**. Consequently, **if the aim** of the sceptics **is to discredit the political appeal to dubious economic imperatives associated with globalisation**, then they might **we**ll **benefit from asking** themselves **why and under what conditions** politicians and **public officials invoke** external **economic constraints** in the first place. It is to this task that we direct our attentions in this paper. Yet at the outset a certain word of caution is perhaps required. For, even if we accept the potential causal role that ideas about globalisation might play in the structuration of political and economic outcomes, we may be in danger of narrowing the discursive field of our attentions at the outset. The ideas policy makers use to legitimate and/or to rationalise their behaviour should not simply be seen as more or less accurate reflections of the context they perceive (based on more or less complete information). Nor should discourses be understood as necessarily and exclusively ‘strategic’ (i.e. as relating to situations in which an actor’s employment of a discourse correlates directly to particular material interests). **Discourse matters** in at least two respects. **The way** in which **actors behave is not merely a reflection** of the degree of accuracy and completeness **of the information they possess**; **it is also** a reflection of **their normative orientation** towards their environment and potential future scenarios. Thus the constraints and/or opportunities which globalisation is held to imply might be understood (or misunderstood) in very similar ways in different (national) contexts. Yet such understanding are likely to provoke divergent responses from political actors with different normative orientations and diverse institutional contexts. Put simply, **though actors may share a** common **understanding of** the process of **globalisation, they may respond** very **differently to its** perceived **challenges and threats** **depending on whether one regards the future it promises in a positive or negative light** – witness the still ongoing debate within the governing SPD in Germany between supporters of Schröder and Lafontaine (see Lafontaine 1998; Lafontaine and Müller 1998; Schröder 1998; and for a commentary Jeffery and Handl 1999), or that in France between Bourdieu, Forrester and anti-globalisation groups like ATTAC on the one hand and social liberals within the Parti Socialiste on the other (see Bourdieu 1998; Boudieu and Wacquant 1999; Forrester 1999; and for a commentary Bouvet and Michel 1999; Meunier 2000). Within the European Commission, there is evidence to suggest that common understandings of globalisation can be quite consistent with distinct conceptions of the capacity to exercise meaningful agency as actors take up quite different ‘subject positions’ in relation to globalisation (Rosamond, 1999; 2000b). **It is important**, then, at the outset **that we consider the potential causal role of ideas about globalisation in the structuration of political and economic outcomes**.3 Our central argument is, we think, likely to prove controversial. It is simply stated, though its implications are more complex. Essentially, we suggest, **policy makers acting on the basis of assumptions consistent with the hyperglobalisation thesis may well serve**, in so doing, **to bring about outcomes consistent with that thesis, irrespective of its veracity and,** indeed, irrespective of its perceived veracity**.** This provocative suggestion with, if warranted, important implications, clearly requires some justification (see also Hay 1999b; Rosamond 1999, 2000b, 2000c). **Globalisation has become** a key referent of contemporary political discourse and, increasingly, **a lens through which policy-makers view the context in which they find themselves.** **If** we can assume that political actors have no more privileged vantage point from which to understand their environment than anyone else and — as most commentators would surely concede — that **one of the principal discourses through which that environment now comes to be understood is that of globalisation, then the content of such ideas is likely to affect significantly political dynamics.**

#### A: The alternative is to affirm the model of the Communist Party – only party organizing can provide effective accountability mechanisms to correct chauvinist tendencies, educate and mobilize marginalized communities, and connect local struggles to a movement for global liberation.

Escalante, Philosophy @ UOregon, 18

[Alyson, M.A., is a Marxist-Leninist, Materialist Feminist and Anti-Imperialist activist. “PARTY ORGANIZING IN THE 21ST CENTURY” September 21st, 2018 <https://theforgenews.org/2018/09/21/party-organizing-in-the-21st-century/>] rVs

I would argue that within the base building movement, there is a move towards party organizing, but this trend has not always been explicitly theorized or forwarded within the movement. My goal in this essay is to argue that base building and dual power strategy can be best forwarded through party organizing, and that party organizing can allow this emerging movement to solidify into a powerful revolutionary socialist tendency in the United States. One of the crucial insights of the base building movement is that the current state of the left in the United States is one in which revolution is not currently possible. There exists very little popular support for socialist politics. A century of anticommunist propaganda has been extremely effective in convincing even the most oppressed and marginalized that communism has nothing to offer them. The base building emphasis on dual power responds directly to this insight. By building institutions which can meet people’s needs, we are able to concretely demonstrate that communists can offer the oppressed relief from the horrific conditions of capitalism. Base building strategy recognizes that actually doing the work to serve the people does infinitely more to create a socialist base of popular support than electing democratic socialist candidates or holding endless political education classes can ever hope to do. Dual power is about proving that we have something to offer the oppressed. The question, of course, remains: once we have built a base of popular support, what do we do next? If it turns out that establishing socialist institutions to meet people’s needs does in fact create sympathy towards the cause of communism, how can we mobilize that base? Put simply: in order to mobilize the base which base builders hope to create, we need to have already done the work of building a communist party. It is not enough to simply meet peoples needs. Rather, we must build the institutions of dual power in the name of communism. We must refuse covert front organizing and instead have a public face as a communist party. When we build tenants unions, serve the people programs, and other dual power projects, we must make it clear that we are organizing as communists, unified around a party, and are not content simply with establishing endless dual power organizations. We must be clear that our strategy is revolutionary and in order to make this clear we must adopt party organizing. By “party organizing” I mean an organizational strategy which adopts the party model. Such organizing focuses on building a party whose membership is formally unified around a party line determined by democratic centralist decision making. The party model creates internal methods for holding party members accountable, unifying party member action around democratically determined goals, and for educating party members in communist theory and praxis. A communist organization utilizing the party model works to build dual power institutions while simultaneously educating the communities they hope to serve. Organizations which adopt the party model focus on propagandizing around the need for revolutionary socialism. They function as the forefront of political organizing, empowering local communities to theorize their liberation through communist theory while organizing communities to literally fight for their liberation. A party is not simply a group of individuals doing work together, but is a formal organization unified in its fight against capitalism. Party organizing has much to offer the base building movement. By working in a unified party, base builders can ensure that local struggles are tied to and informed by a unified national and international strategy. While the most horrific manifestations of capitalism take on particular and unique form at the local level, we need to remember that our struggle is against a material base which functions not only at the national but at the international level. The formal structures provided by a democratic centralist party model allow individual locals to have a voice in open debate, but also allow for a unified strategy to emerge from democratic consensus. Furthermore, party organizing allows for local organizations and individual organizers to be held accountable for their actions. It allows criticism to function not as one independent group criticizing another independent group, but rather as comrades with a formal organizational unity working together to sharpen each others strategies and to help correct chauvinist ideas and actions. In the context of the socialist movement within the United States, such accountability is crucial. As a movement which operates within a settler colonial society, imperialist and colonial ideal frequently infect leftist organizing. Creating formal unity and party procedure for dealing with and correcting these ideas allows us to address these consistent problems within American socialist organizing. Having a formal party which unifies the various dual power projects being undertaken at the local level also allows for base builders to not simply meet peoples needs, but to pull them into the membership of the party as organizers themselves. The party model creates a means for sustained growth to occur by unifying organizers in a manner that allows for skills, strategies, and ideas to be shared with newer organizers. It also allows community members who have been served by dual power projects to take an active role in organizing by becoming party members and participating in the continued growth of base building strategy. It ensures that there are formal processes for educating communities in communist theory and praxis, and also enables them to act and organize in accordance with their own local conditions. We also must recognize that the current state of the base building movement precludes the possibility of such a national unified party in the present moment. Since base building strategy is being undertaken in a number of already established organizations, it is not likely that base builders would abandon these organizations in favor of founding a unified party. Additionally, it would not be strategic to immediately undertake such complete unification because it would mean abandoning the organizational contexts in which concrete gains are already being made and in which growth is currently occurring. What is important for base builders to focus on in the current moment is building dual power on a local level alongside building a national movement. This means aspiring towards the possibility of a unified party, while pursuing continued local growth. The movement within the Marxist Center network towards some form of unification is positive step in the right direction. The independent party emphasis within the Refoundation caucus should also be recognized as a positive approach. It is important for base builders to continue to explore the possibility of unification, and to maintain unification through a party model as a long term goal. In the meantime, individual base building organizations ought to adopt party models for their local organizing. Local organizations ought to be building dual power alongside recruitment into their organizations, education of community members in communist theory and praxis, and the establishment of armed and militant party cadres capable of defending dual power institutions from state terror. Dual power institutions must be unified openly and transparently around these organizations in order for them to operate as more than “red charities.” Serving the people means meeting their material needs while also educating and propagandizing. It means radicalizing, recruiting, and organizing. The party model remains the most useful method for achieving these ends. The use of the party model by local organizations allows base builders to gain popular support, and most importantly, to mobilize their base of popular support towards revolutionary ends, not simply towards the construction of a parallel economy which exists as an end in and of itself. It is my hope that we will see future unification of the various local base building organizations into a national party, but in the meantime we must push for party organizing at the local level. If local organizations adopt party organizing, it ought to become clear that a unified national party will have to be the long term goal of the base building movement. Many of the already existing organizations within the base building movement already operate according to these principles. I do not mean to suggest otherwise. Rather, my hope is to suggest that we ought to be explicit about the need for party organizing and emphasize the relationship between dual power and the party model. Doing so will make it clear that the base building movement is not pursuing a cooperative economy alongside capitalism, but is pursuing a revolutionary socialist strategy capable of fighting capitalism. The long term details of base building and dual power organizing will arise organically in response to the conditions the movement finds itself operating within. I hope that I have put forward a useful contribution to the discussion about base building organizing, and have demonstrated the need for party organizing in order to ensure that the base building tendency maintains a revolutionary orientation. The finer details of revolutionary strategy will be worked out over time and are not a good subject for public discussion. I strongly believe party organizing offers the best path for ensuring that such strategy will succeed. My goal here is not to dictate the only possible path forward but to open a conversation about how the base building movement will organize as it transitions from a loose network of individual organizations into a unified socialist tendency. These discussions and debates will be crucial to ensuring that this rapidly growing movement can succeed.

## Vac Dip CP

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#### Text: The People’s Republic of China should offer Chinese developed vaccines and medical technology related to COVID-19 to the world for free

#### The CP massively ramps up Chinese “vaccine diplomacy” which solves the case

Juecheng and Yuwei 8-13-21

(Zhao and Hu, https://www.globaltimes.cn/page/202108/1231387.shtml)

One of China’s most valued contributions to the global fair accessibility to COVID-19 vaccines is to enable more developing countries to hone their ability to produce vaccines by themselves, Zha Daojiong, professor of International Political Economy from Peking University, who closely studies the global vaccine equitable allocation framework, told the Global Times in a recent exclusive interview. Sharing his insights on widely discussed “vaccine nationalism,” “wavering vaccine intellectual property,” and “COVAX operation challenges,” Zha believes that China is advocating negotiations among countries on equitable global distribution of vaccines from a humanitarian, and global perspective. China has vowed to make efforts to provide the world with 2 billion doses of COVID-19 vaccines this year and donate $100 million to COVAX to promote global vaccine provision. This commitment comes amid the rampaging Delta variant, which is bringing more challenges for developing countries to access vaccines and combat the pandemic while the West continues to drag its heels in fulfilling its promises. The promise was made at the first meeting of a forum on international cooperation on COVID-19 vaccines held on August 5. Zha suggested that the forum, alongside the Initiative for Belt and Road Partnership on COVID-19 Vaccine Cooperation, reflect China’s efforts to support long-term cooperation in the vaccine industry globally. However, some Western media have labeled China and Russia as the pioneers of the global "vaccine diplomacy" campaign. The choice of vaccines by countries has become the epitome of global geopolitics.   Foreign comments on China using "vaccine diplomacy" in a narrow geopolitical sense reflect the real competition among COVID-19 vaccine providers, Zha told the Global Times. Due to China’s mature vaccine technologies, longer shelf life and lower requirement for storage and transportation, Chinese made vaccines are a more preferable choice for many developing countries with relatively weak vaccination infrastructure . This has been reflected in the approval of Chinese vaccines in more than 100 countries. But the phenomenon of “vaccine nationalism” was never absent in the decision by governments to choose vaccines, Zha suggested. “For example, some countries and regions would include geopolitical factors in choosing vaccines. These countries would reject certain vaccines. Moreover, some media outlets refuse to accept the fact that the professional assessment of vaccine efficacy is also a scientific process. Instead, they made comments on potential vaccines based on their geopolitical interests. This is also a kind of “vaccine nationalism”. Voices blaming “vaccine nationalism” have long been present in developed countries. For instance, Zha recalled how, during the H1N1 pandemic of 2009 which affected more than 200 countries and regions for more than a year, certain developed countries bought out entire stocks of vaccines against H1N1 once they were developed. Though some of those countries had promised to donate vaccines to others after they met their vaccination needs, the virus had long disappeared before their donations were made. Therefore, many in other nations lost the opportunity of a timely vaccination. Providing assistance from one country to another in the field of infectious or non-infectious diseases is often referred to as "health diplomacy." Some international public health research literature support "health diplomacy" because cooperation in this field is conducive to the improvement of political, economic and diplomatic relations, Zha said. China has taken important steps to close the global vaccine gap, including the acceleration of large-scale production, boosting fair distribution, and licensing local production in more countries.

#### Successful vaccine diplomacy is key to overall Chinese Soft Power

Huang, PhD, 3-11-21

(YANZHONG HUANG is Senior Fellow for Global Health at the Council on Foreign Relations, a Professor at Seton Hall University’s School of Diplomacy and International Relations, and Director of the school’s Center for Global Health Studies. https://www.foreignaffairs.com/articles/china/2021-03-11/vaccine-diplomacy-paying-china )

Vaccines have had a place in diplomacy since the Cold War era. The country that can manufacture and distribute lifesaving injections to others less fortunate sees a return on its investment in the form of soft power: prestige, goodwill, perhaps a degree of indebtedness, even awe. Today the country moving fastest toward consolidating these gains may be China, under President Xi Jinping, who proclaimed last May that Chinese-made vaccines against COVID-19 would become a “global public good.” Since that time, top officials have promised many developing countries priority access to Chinese vaccines, and the Chinese Foreign Ministry has announced that the country is providing free vaccines to 69 countries and commercially exporting them to 28 more. China’s competitors worry that where Beijing’s inoculations go, its influence will follow. But the field of COVID-19 vaccination is still a largely uncharted one and scattered with barriers, whether logistical, scientific, psychological, or geopolitical. China’s path through this labyrinth is neither obvious nor assured. The country faces stiffening competition from Russia and India. Now the United States, too, has entered the global stakes for equitable distribution of safe and effective vaccines. China has yet to prove that it can fulfill the role it has taken on or win the trust of those it has offered to aid. CHINA'S STAKE The Chinese government dislikes the term “vaccine diplomacy.” The implication that China would distribute vaccine doses in order to broaden its global political influence is a “sinister” one, according to the official Xinhua News Agency. Rather, the Chinese government contends that “in promoting cooperation in combating the pandemic, China does not seek any geopolitical goals or have any economic interest considerations, and it has never attached any political strings.” Xi has further stressed that by distributing necessary goods in a crisis, China is merely acting as a responsible great power should. In this regard, China may seek to succeed with vaccines where it failed with masks: last spring, quality-control issues and clumsy propaganda tarnished the country’s efforts to supply medical products to the developed world. Now China is looking to showcase its global health leadership to lower- and middle-income countries, where it is distributing vaccines. But Beijing surely has additional foreign policy objectives in mind. China began its vaccine development projects early last spring, and state media made quite clear that through them, China hoped to demonstrate its technological prowess and the superiority of its authoritarian model of governance. “We are not lagging behind the United States as far as the technology is concerned,” a Chinese virologist told the state-backed Global Times. Another scientist highlighted China’s “system advantages”: “The United States is no match for China in terms of concentrating power to accomplish big things.” Indeed, unlike in the United States, vaccine development in China was a highly state-driven process. The Chinese government simultaneously pushed several technological approaches, including inactivated vaccines, mRNA vaccines, and adenovirus vector vaccines. It mobilized at least 22 institutes and firms to work on 17 vaccine development projects. And until last summer, China was leading the global race in vaccine development. It developed a vaccine (Ad5-nCoV) as early as February 2020, started Phase 1 clinical trials on March 16, and published results of the trials in late May. General Chen Wei, the face of China’s vaccine development operation, celebrated such achievements as “an embodiment of our country’s S&T progress, an embodiment of China’s great-power image and responsibility, and, even more, a contribution to humankind.” Behind such lofty goals lie commercial objectives, too. Health-related development assistance has long offered Chinese pharmaceutical companies a low-cost means of expanding their market share in the developing world. In March 2020, President Xi explicitly linked the shipment of medical supplies overseas to the “Health Silk Road,” now an important component of the Belt and Road Initiative. Xiaofeng Liang, a former deputy director of the Chinese Center for Disease Control and Prevention, has publicly called for prioritizing BRI countries for access to Chinese vaccines. But the opportunity hardly ends there. Prior to the COVID-19 pandemic, few Chinese pharmaceutical companies had received World Health Organization prequalification to supply medical products to international organizations and donor funds. In 2019, China’s share in the value of UN-procured medical products was only 1.9 percent, compared with 21.9 percent for India. Chinese media lamented that of the 155 WHO-prequalified vaccines, only four were from China, compared with 44 from India. Indeed, Indian pharmaceutical firms produced more than 60 percent of the vaccines sold worldwide. The huge global demand for COVID-19 vaccines and “vaccine nationalism” in wealthy nations have created a great opportunity for China to break into a market that Indian and Western pharmaceutical firms have long dominated. If the vaccine were priced at $10 per dose with a 40 percent net profit margin, even a 15 percent share of the vaccine market in lower- and middle-income countries would generate total sales of $10.8 billion and a profit of $4.32 billion for the Chinese economy. In reality, Chinese vaccines are often priced higher than $10.

#### Chinese leadership stops global secessionist conflict

Griffiths 16 **-** Senior Lecturer in the Department of Government and International Relations at the University of Sydney (Ryan, States, Nations, and Territorial Stability: Why Chinese Hegemony Would Be Better for International Order, Security Studies, 25:3, 519-545, DOI: 10.1080/09636412.2016.1195628)

I began the article by claiming that the Pax Sinica would be better for international order. In making this claim I define “better” in narrow terms emphasizing territorial stability, which can be assessed in several ways. How often do either external aggressors or internal separatists shift sovereign borders through violence? What is the frequency of secessionist civil war? How much international discord is there on the topic of secession and recognition? This is the ledger I use when comparing the Pax Sinica with the post-1945 American-led order. There are many other factors, to be sure, and critics might point to a number of ways in which Chinese hegemony would be worse. For example, they may question the support for human rights under Chinese leadership. I do not argue that Chinese hegemony would be better in all ways—there are pros and cons to any order—but I contend that there are net benefits where territorial stability is concerned. Analyzed under these terms the key differences between the American order and the imagined Chinese order have to do with the politics of secession and sovereign recognition. International order matters because it determines diplomatic practices and shapes behavior. It sets the rules of the game. The American-led order over the last seventy years has attempted to balance the norms of territorial integrity and self-determination by establishing rules for wh

at nations are eligible for independence. But, as Fabry notes, that is an enormously challenging project because developing clear rules that separate the lucky from the unlucky requires that states derive agreed-upon criteria in a constitutive process.73 Given the politics and conflicting principles of international life (and the evolving nature of normative arguments), inconsistency, ambiguity, and accusations of hypocrisy are unavoidable. The resulting political space creates uncertainty for states and nationalist movements over when self-determination applies and when it should be subordinated to territorial integrity. Incidents like the Ukrainian crisis cast a shadow over separatist crises elsewhere. The leadership in Azerbaijan detects double standards in American policy, wondering why it “punishes Russia for annexing Crimea, but not Armenia for similar behavior in Karabakh.”74 Such uncertainly can makes states feel vulnerable, as it has in Azerbaijan, change the incentives for key actors, and increase the chance of conflict. Secessionist civil war is a common feature of contemporary times. Scholars estimate that at least half of the civil wars since 1945 have involved secessionism, and Barbara F. Walter argues that secessionism is the chief source of violence in the world today.75 Erica Chenowith and Maria Stephan find that secessionism is one of the few (if only) forms of political protest where violent tactics are more effective than nonviolent.76 Meanwhile, Tanisha Fazal and I identify fifty-five secessionist movements as of 2011 and record that many of these movements feel they have a reasonable chance of gaining independence in light of the somewhat flexible practices surrounding recognition.77 Given the strategic environment in which secessionists operate, where violence can be effective and where sovereignty is thought to be obtainable, it should come as no surprise that conflict is common. In regard to territorial stability, the concern of contemporary times is not traditional territorial conquest, but the threat posed by state fragmentation.78 This is where Chinese hegemony ought to improve international order.

## Innovation DA

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#### L: Pharma industry innovation is up but profit margins are razor thin

Young 9-14-21

(Peter, CEO and President of Young & Partners, and a member of Pharm Exec’s Editorial Advisory Board. https://www.pharmexec.com/view/fishawack-health-appoints-new-ceo-jonathan-koch)

Business. The business outlook for pharma manufacturers is positive with regard to drug development and the volume and quality of promising drugs in the pipeline. The industry’s innovations in drug development and productivity have improved. Combined with indirect R&D pursuits through the biotech industry, overall development activity has been strong and should continue to be strong. There has been a shift in emphasis toward orphan drugs, oncology therapies, new innovations such as mRNA, gene therapy, CAR-T, immune system solutions, CRISPR, etc. The current pandemic has been a plus for the reputation of the industry, but a negative with regard to the ability to execute clinical trials and to maintain industry supply chains. Generic pharma companies are under severe profit pressures and will continue to consolidate, cut costs, and try to push selectively into higher value and more protected product areas. They are under intense pricing and competitive pressure.

**L: Strong IP protection spurs innovation by encouraging risk-taking and incentivizing knowledge sharing -- prefer statistical analysis of multiple studies**

**Ezell and Cory 19** [Stephen Ezell, vice president & global innovation policy @ ITIF, BS Georgetown School of Foreign Service. Nigel Cory, associate director covering trade policy @ ITIF, MA public policy @ Georgetown. "The Way Forward for Intellectual Property Internationally," Information Technology & Innovation Foundation, 4-25-2019, accessed 8-25-2021, https://itif.org/publications/2019/04/25/way-forward-intellectual-property-internationally] HWIC

IPRs Strengthen Innovation

Intellectual property rights power innovation. For instance, analyzing the level of intellectual property protections (via the World Economic Forum’s Global Competitiveness reports) and creative outputs (via the Global Innovation Index) shows that countries with stronger IP protection have more creative outputs (in terms of intangible assets and creative goods and services in a nation’s media, printing and publishing, and entertainment industries, including online), even at varying levels of development.46

IPR reforms also introduce strong incentives for domestic innovation. Sherwood, using case studies from 18 developing countries, concluded that poor provision of intellectual property rights deters local innovation and risk-taking.47 In contrast, IPR reform has been associated with increased innovative activity, as measured by domestic patent filings, albeit with some variation across countries and sectors.48 For example, Ryan, in a study of biomedical innovations and patent reform in Brazil, found that patents provided incentives for innovation investments and facilitated the functioning of technology markets.49 Park and Lippoldt also observed that the provision of adequate protection for IPRs can help to stimulate local innovation, in some cases building on the transfer of technologies that provide inputs and spillovers.50 In other words, local innovators are introduced to technologies first through the technology transfer that takes place in an environment wherein protection of IPRs is assured; then, they may build on those ideas to create an evolved product or develop alternate approaches (i.e., to innovate). Related research finds that trade in technology—through channels including imports, foreign direct investment, and technology licensing—improves the quality of developing-country innovation by increasing the pool of ideas and efficiency of innovation by encouraging the division of innovative labor and specialization.51 However, Maskus notes that without protection from potential abuse of their newly developed technologies, foreign enterprises may be less willing to reveal technical information associated with their innovations.52 The protection of patents and trade secrets provides necessary legal assurances for firms wishing to reveal proprietary characteristics of technologies to subsidiaries and licensees via contracts.

Counties with stronger IP protection have more creative outputs (in terms of intangible assets and creative goods and services in a nation’s media, printing and publishing, and entertainment industries, including online), even at varying levels of development.

The relationship between IPR rights and innovation can also be seen in studies of how the introduction of stronger IPR laws, with regard to patents, copyrights, and trademarks, affect R&D activity in an economy. Studies by Varsakelis and by Kanwar and Evenson found that R&D to GDP ratios are positively related to the strength of patent rights, and are conditional on other factors.53 Cavazos Cepeda et al. found a positive influence of IPRs on the level of R&D in an economy, with each 1 percent increase in the level of protection of IPRs in an economy (as measured by improvements to a country’s score in the Patent Rights Index) equating to, on average, a 0.7 percent increase in the domestic level of R&D.54 Likewise, a 1 percent increase in copyright protection was associated with a 3.3 percent increase in domestic R&D. Similarly, when trademark protection increased by 1 percent, there was an associated R&D increase of 1.4 percent. As the authors concluded, “Increases in the protection of the IPRs carried economic benefits in the form of higher inflows of FDI, and increases in the levels of both domestically conducted R&D and service imports as measured by licensing fees.”55 As Jackson summarized, regarding the relationship between IPR reform and both innovation and R&D, and FDI, “In addition to spurring domestic innovation, strong intellectual property rights can increase incentives for foreign direct investment which in turn also leads to economic growth.”56

**I: 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, accessed 8-8-2021, https://www.rand.org/pubs/perspectives/PEA407-1.html] HWIC

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.

**I: That causes extinction, which outweighs.**

**Millett & Snyder-Beattie ‘17**. Millett, Ph.D., Senior Research Fellow, Future of Humanity Institute, University of Oxford; and Snyder-Beattie, M.S., Director of Research, Future of Humanity Institute, University of Oxford. 08-01-2017. “Existential Risk and Cost-Effective Biosecurity,” Health Security, 15(4), PubMed

In the decades to come, advanced bioweapons could **threaten human existence**. Although the **probability** of human extinction from bioweapons **may** be low, the **expected value** of **reducing** the risk could **still** be **large**, since such risks jeopardize the existence of **all future generations**. We provide an overview of biotechnological extinction risk, make some rough initial estimates for how severe the risks might be, and compare the cost-effectiveness of reducing these extinction-level risks with existing biosecurity work. We find that reducing human extinction risk can be more cost-effective than reducing smaller-scale risks, even when using conservative estimates. This suggests that the risks are not low enough to ignore and that more ought to be done to prevent the worst-case scenarios. How worthwhile

is it spending resources to study and mitigate the chance of human extinction from biological risks? The risks of such a catastrophe are presumably low, so a skeptic might argue that addressing such risks would be a waste of scarce resources. In this article, we investigate this position using a cost-effectiveness approach and ultimately conclude that the expected value of reducing these risks is large, especially since such risks jeopardize the existence of all future human lives. **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 the Western Abenaki (which suffered a staggering 98% loss of population).9 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 biotech**nology 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.19-21 Although these experiments had scientific merit and were not conducted with malicious intent, their implications are still worrying. This is especially true given that there is also a **long historical track record** of**state-run bioweapon research** applying cutting-edge science and technology to design agents not previously seen in nature. The Soviet bioweapons program developed agents with traits such as enhanced virulence, resistance to therapies, greater environmental resilience, increased difficulty to diagnose or treat, and which caused unexpected disease presentations and outcomes.22 Delivery capabilities have also been subject to the cutting edge of technical development, with Canadian, US, and UK bioweapon efforts playing a critical role in developing the discipline of aerobiology.23,24 While there is no evidence of state-run bioweapons programs directly attempting to develop or deploy bioweapons that would pose an existential risk, the logic of deterrence and **m**utually **a**ssured **d**estruction could create such incentives in more unstable political environments or following a breakdown of the Biological Weapons Convention.25 The **possibility of a war** between great powers could also increase the pressure to use such weapons—during the World Wars, bioweapons were used across multiple continents, with Germany targeting animals in WWI,26 and Japan using plague to cause an epidemic in China during WWII.27

# Case

**No solvency and reject "empirical" claims -- vaccines require complex infrastructure to manufacture, not just patents**

**Hotez 5/10** [Peter J. Hotez, Maria Elena Bottazzi, and Prashant Yadav. "Producing a Vaccine Requires More Than a Patent," Foreign Affairs, 5-10-2021, accessed 8-8-2021, https://www.foreignaffairs.com/articles/united-states/2021-05-10/producing-vaccine-requires-more-patent] HWIC

On May 5, President Joe Biden announced that the United States would support an international bid to waive intellectual property rights to vaccines for the duration of the coronavirus pandemic, thereby ostensibly allowing other countries to ramp up production even of the sophisticated technology behind the Pfizer-BioNTech and Moderna vaccines against COVID-19. Many in the global health community and developing world welcomed the decision as a victory for greater equity in vaccine distribution, in which middle- and low-income countries are lagging far behind wealthy ones. But the jubilation may be premature. The drive for intellectual property waivers originates in part from the world’s experience fighting the last war, against HIV/AIDS. Patent pools, intellectual property waivers, and other liberalizing mechanisms were urgent in assuring equity of access to lifesaving drugs during that epidemic. But these tools are better suited to medicines and other pharmaceuticals than to vaccines. Producing vaccines—particularly those as technologically complex as the messenger RNA (mRNA) inoculations against COVID-19—requires not only patents but an entire infrastructure that cannot be transferred overnight. The sharing of patents is an important and welcome development for the long term, but it may not even be the most pressing first step. JUST OPEN THE SPIGOT At the turn of the millennium, multinational pharmaceutical companies were charging $10,000 per patient for a daily drug regimen that could keep those infected with HIV/AIDS alive. Those in low- and middle-income countries in Africa and elsewhere could access this cocktail only under limited circumstances. Then, in 2001, the Indian drug manufacturer Cipla Limited began producing versions of a triple antiretroviral drug cocktail for a mere $350. Cipla, in collaboration with Médecins Sans Frontières (Doctors Without Borders), helped usher in a new era of global access to essential medicines—one that justified relaxing or even ignoring international patents and other property rights to produce and distribute an important and lifesaving drug as a generic. Since that time, global health advocacy organizations have found increasingly sophisticated ways to work with multinationals in ensuring access to essential medicines for low- and middle-income countries. In the 2010s, the global health initiative Unitaid helped create a Medicines Patent Pool, in which pharmaceutical companies from all over the world offered antiretroviral drug licenses, thereby creating a path for developing generic versions so long as the patent holders received royalties. The mechanism supplied voluntary licenses to new producers even while protecting the legal rights of the drugs’ original manufacturers. Companies such as Gilead, for example, have supplied voluntary licenses for their antivirals directly to generic manufacturers, allowing for tiered pricing across countries. Barely any COVID-19 vaccines have been administered in the African continent or in low- or middle-income countries in Asia and Latin America. Global health professionals have understandably sought to ascertain whether a similar approach could help make the distribution of COVID-19 vaccines less lopsided. More than one billion vaccine doses have now been administered—but overwhelmingly to people living in just a few countries. More than half have been administered in the United States (250 million) and China (290 million) alone, followed by India (160 million), the United Kingdom (51 million), and Germany (32 million). In contrast, for all practical purposes, barely any COVID-19 vaccines have been [administered](https://www.nytimes.com/interactive/2021/world/covid-vaccinations-tracker.html) in the African continent or in low- or middle-income countries in Asia and Latin America. Global health advocates have responded to this inequity by seeking to apply the lessons they learned from antiretroviral drugs and demanding patent pools or other intellectual property waivers for COVID-19 vaccines. In March 2021, Médecins Sans Frontières organized protests at the World Trade Organization (WTO) headquarters in Geneva, unfurling a banner that read, “No COVID Monopolies—Wealthy Countries Stop Blocking TRIPS Waiver,” referring to the organization’s Agreement on Trade-Related Aspects of Intellectual Property Rights. The assumption underlying such demands is that intellectual property is a crucial barrier blocking vaccine developers, especially in low- and middle-income countries, from producing COVID-19 vaccines to scale—particularly the high-performing mRNA vaccines that Pfizer-BioNTech and Moderna currently produce. These vaccines elicit more than 90 percent protective immunity against both symptomatic illness and documented infection, including asymptomatic infection, with COVID-19. They are successfully driving the recovery of the United States, Israel, and other nations. But so far, mRNA vaccines are mostly invisible to Africa, Latin America, and low- and middle-income countries in other regions. The hope of those pushing for TRIPS waivers and patent pools is that these will unleash the technology to make the recovery global. IT TAKES A WHOLE ECOSYSTEM Intellectual property sharing may be helpful in the long term. But producing complicated biologics, especially innovative ones such as mRNA or adenovirus-vectored vaccines, is not solely a matter of patent access. Small-molecule antiviral drugs are comparatively straightforward: the multistep chemical processes through which they are synthesized are often fully detailed in published patents or scientific papers. Chemists and formulation experts can often synthesize and scale up production just from knowing the drug structure. But vaccines are different. Producing and manufacturing lipid-encased mRNA molecules, recombinant adenoviruses, or even the proteins or whole inactivated viruses used in older-generation vaccines requires a far higher level of sophistication than is needed for producing small-molecule drugs. Moreover, vaccine production must meet stringent requirements for quality control, quality assurance, and regulatory oversight. The **effective transfer of such complex technology requires a receiving ecosystem that can take years, sometimes decades, to build**. Countries seeking to ramp up vaccine production will need to train staff scientists and technicians. They will also need scientific administrators versed not only in basic research and development but also in detailed record keeping, including specific documentation practices such as batch production records. Moreover, they will need strong quality control systems and regulatory guardrails. Building such an infrastructure requires intensive training and often considerable financial investment and risk. It also takes time—by some estimates, vaccine development requires at least 11 years, and even then the probability that such efforts will result in bringing a vaccine to market is less than ten percent. Consider that the COVID-19 vaccines were themselves the outcome of decades of research and development. Few nations are prepared to take such risks. Only a handful of low- or middle-income countries currently have the capacity to produce new vaccines. Only a handful of low- or middle-income countries currently have the capacity to produce new vaccines. The most notable and largest is India, which currently makes the adenovirus-vectored vaccines developed by Janssen and by Oxford and AstraZeneca, as well as an older-technology recombinant protein vaccine and a whole inactivated virus vaccine. Manufacturers in Brazil, Cuba, and some Southeast Asian countries have experience producing childhood vaccines and may be able to develop the capacity to make COVID-19 vaccines as well. Other possibilities may develop elsewhere, including in the Middle East and Africa. But in the near term, such manufacturers will require financing, access to very large amounts of raw materials and supplies (possibly including relaxation of export controls), and some technical expertise in manufacturing and quality control if they are to produce the existing vaccines against COVID-19. Vaccinating India alone will require almost two billion doses, and more than 12 billion doses will be required to vaccinate the world. The emergence of new variants and the need for booster doses may increase demand even further. Whether mRNA vaccine technology can be scaled to produce billions of doses in 2021, or even by early 2022, remains entirely unknown, but the goal is worth pursuing. To this end, some kind of patent relaxation may be necessary, but far from sufficient. Would-be producers will need technical know-how, regulatory controls, and components that are currently in very short supply, such as nucleotides and lipids.

#### Tech transfer is key and not included under IP

Smith 05/05

(Laura Smith-Spark; Newsdesk Editor, CNN Digital; (05-05-21) Rich nations urged to share vaccine knowledge while WTO debates waiving patents; CNN; <https://www.cnn.com/2021/05/05/world/covid-19-vaccine-patents-wto-intl/index.html>; CKD)

Thomas Bollyky, director of the Global Health Program at the Council on Foreign Relations, told CNN on Friday that what's really needed to scale up global manufacturing of vaccines is technology transfer. "It's not just a matter of intellectual property. It's also the transfer of know-how," he said. "I don't think there's clear evidence that a waiver of an intellectual property is going to be the best way for that technology transfer to occur." Waiving patents will not work in the same way for vaccines as it has for drugs, Bollyky said. For HIV drugs, for example, manufacturers were more or less able to reverse engineer them without much help from the original developer. "It's very different for vaccines, where it's really a biological process as much as a product. It's hard to scale up manufacturing in this process for the original company, let alone another manufacturer trying to figure this out without assistance," he said. "It requires a lot of knowledge that's not part of the IP." The deal between AstraZeneca and the Serum Institute of India is a successful example of such technology transfer, Bollyky said, where the licensing of IP happened voluntarily. "The question is what can we do to facilitate more deals like the one between AstraZeneca and the Serum Institute of India to have this transfer," he said. Michael Head, senior research fellow in global health at the University of Southampton, in England, told CNN that increasing regional manufacturing capacity, particularly in the global south, was key -- and should be a focus between pandemics. "Sharing intellectual property during the pandemic is something that should happen but that doesn't resolve the issues," he said. "Manufacturing vaccines is hard. It's hard to rapidly set up a new site with all the equipment, infrastructure, all the vaccine ingredients, with suitable staff to produce a large number of high quality vaccine products." Philanthropist Bill Gates, a major supporter of [global Covid-19 vaccine equity](https://www.cnn.com/2021/02/05/world/covax-explainer-intl/index.html) through the Bill & Melinda Gates Foundation, also [told Sky News](https://news.sky.com/story/covid-19-bill-gates-hopeful-world-completely-back-to-normal-by-end-of-2022-and-vaccine-sharing-to-ramp-up-12285840) last month that he did not believe overriding IP rules was the answer. "There's only so many vaccine factories in the world and people are very serious about the safety of vaccines," he said. "The thing that's holding things back in this case is not intellectual property. There's not, like, some idle vaccine factory with regulatory approval that makes magically safe vaccines. You've got to do the trials on these things and every manufacturing process has to be looked at in a very careful way."

#### Equitable distribution of vaccines can’t combat disease spread because of other barriers like vaccine uptake, effectiveness, durability, eligibility factors, logistical problems, and mutations- ignore aff’s myopic promotions

MacLeod 2-10 [Iain MacLeod, co-founder and CEO of Aldatu Biosciences of Watertown, Massachusetts, which develops novel viral diagnostics, including those for pathogens such as SARS-CoV-2, and a research associate at the Harvard T.H. Chan School of Public Health. “Do the math: Vaccines alone won’t get us out of this pandemic.” February 10, 2021. <https://www.statnews.com/2021/02/10/vaccines-alone-wont-end-pandemic/>] AL

But it seems as if there is light at the end of the tunnel. As long as we maintain social distancing, keep wearing masks, and washing our hands, it feels to many as though we can hold on until we get vaccinated. I’m sorry to be writing the words that follow, but here they are: We can’t vaccinate our way out of this pandemic. And the myopic focus on achieving herd immunity through mass vaccination may even make it tougher for America — and the world — to defeat Covid-19. Don’t get me wrong: Mass vaccination is essential. But herd immunity is a numbers game. It is defined as the point at which community spread of a disease stops because unprotected individuals are surrounded b

y a “herd” of people who are immune to infection, making it difficult, if not impossible, for infected people to pass on the disease. Many experts have said we will achieve herd immunity when about 70% of the population is immune to SARS-CoV-2, the virus that causes Covid-19, either through vaccination or by having had Covid-19. How do we reach that number? It’s harder than it seems. For starters, while the Pfizer/BioNTech and Moderna vaccines showed about 95% efficacy in the clinical trials, **vaccine effectiveness** — how well a vaccine performs under real-world conditions — is likely to be lower for several reasons. One is that the people who participate in clinical trials are an imperfect representation of the whole population. They tend to be healthier, and younger. Real-world factors such as vaccine transportation and storage can also reduce vaccine effectiveness. Say the Moderna and Pfizer vaccines now being given across the country achieve 90% effectiveness. Vaccinating 70% of U.S. residents puts us at 63% immunity. So, we’ll need to vaccinate a full 80% of the population to reach the herd immunity threshold. **Additional vaccines are starting to be approved. Some of them have lower efficacy.** For instance, the AstraZeneca vaccine has about 70% efficacy, and Johnson & Johnson has reported that its one-dose vaccine has 66% efficacy. Their real-world performance could be lower still. If these vaccines become part of the mix in the U.S., actual protection will be lower than the estimated 90% we’d get from just the Moderna and Pfizer vaccines. There are other barriers to achieving herd immunity. Vaccine uptake — how many people actually get vaccinated — is far below the level we need, in part because Covid-19 beliefs have been politicized in the U.S. and a percentage of the population doesn’t even believe the disease is real. In a Kaiser Health News survey released near the end of January, 13% of Americans said they would “definitely not” get vaccinated, 7% would take the vaccine only if it was “required,” and another 31% would “wait and see how it’s working” before getting vaccinated. Not encouraging numbers for those hoping for a quick journey to herd immunity. Even when ample vaccine supplies are restored — perhaps by President Biden invoking the Defense Production Act — other factors will further drive down the number of people who get vaccinated. Eligibility factors currently exclude approximately 25% of U.S. residents from Covid-19 vaccination. The Pfizer vaccine can be administered only to those age 16 and up; for the Moderna vaccine, it’s those 18 and up. This represents approximately 20% of the population. Furthermore, although the CDC says that pregnant people may get vaccinated, it stops short of a clear recommendation. The decision is a “personal choice” left up to individuals and their health care providers. Excluding those currently ineligible for vaccination against SARS-CoV-2 due to age or other conditions leaves 75% of Americans with no restrictions on vaccination. Factoring in the 13% of Americans who definitely don’t want the vaccine and the 7% who would get it only if it was required means just 49.5% of Americans would have immunity in the near future. If half of those who are in a wait-and-see mode don’t get vaccinated — another 15% of the population — then we are looking at just 40% vaccine coverage of the currently eligible population, far below the 70% needed for herd immunity. And that’s even before considering that real-world vaccine effectiveness will be below clinical trial levels. The young people who aren’t cleared to get the Moderna and Pfizer vaccines have proven to be highly efficient asymptomatic spreaders of Covid-19. Leaving this population unprotected will enable the disease to continue to spread widely. Finally, we don’t yet know the durability of the immune response to the various vaccines. It may persist. Or it may wear off, leaving people vulnerable after they’ve been vaccinated and creating conditions for new outbreaks. If my years of global health work on the HIV/AIDS epidemic has taught me anything, it’s that even the best laid plans can’t anticipate every challenge. To vaccinate 75% of the U.S. population, approximately 248 million people — that’s nearly 500 million doses — are needed. And it means we need to be vaccinating nearly 2 million people a day so all of them are immune by the fall of 2021. As I write this, we’re vaccinating only about 1 million people a day. At that pace, Reuters estimates it would take until April 2022 for 75% of Americans to receive at least their first vaccine dose. And that’s only if everything goes well logistically (it won’t) and if there are no further mutations in SARS-CoV-2 that make combating it more difficult (there will be). It’s time to stop promoting the myopic belief that the unrealistic goal of herd immunity can be achieved in 2021 and start looking to reinforcing all aspects of the health care response as we start to concede that Covid-19 will become an endemic disease that will continue to lurk in the population. For the foreseeable future, that means continued physical distancing; occupancy limits in restaurants and other retail establishments; replacement of physical menus with smart phone-based menus to prevent surface spread of the virus, and more. We’ll also need to monitor people who have been vaccinated to gauge the durability of the immune system’s response and whether booster shots are necessary, as they are for tetanus and diphtheria. Finally, our nation’s public health infrastructure will need to be bolstered, putting in place new protocols to monitor for new variants of the virus as soon as they emerge. Can we defeat Covid-19? We can and we will. But setting sights on a near-term goal of achieving herd immunity ignores the math that governs the spread of disease. That approach is going to take a while. To get past Covid-19, we need to use all the tools available.