TRANSCENDING NEOLIBERALISM:

How the Free-Market Myth Has Prevented Climate Action





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ACKNOWLEDGMENTS

The authors thank Max Jerneck (Stockholm School of Economics), Liz Stanton (Applied Economics Clinic), and Nell Abernathy (Roosevelt Institute) for their comments and insight. We are also grateful to participants at the Eastern Economic Association and the Union for Radical Political Economics 50th Anniversary Conference. Roosevelt staff Kendra Bozarth, Debarati Ghosh, Matt Hughes, Kristina Karlsson, Victoria Streker, and Ariela Weinberger all contributed to the project.

This report was made possible with the generous support of Partners for a New Economy. The contents of this publication are solely the responsibility of the authors.

Executive Summary

The earth has already warmed by 1.2°C (2.2°F). If the international community continues with business as usual—relying on fossil fuels for the bulk of our energy needs—the planet will warm by 3° to 4°C by the end of the century. If this is allowed to occur, large swaths of the earth will become uninhabitable for humans. Ecosystems that we rely on for our very existence will collapse. Corals will cook, with potentially devastating consequences for fisheries. These are not unexpected outcomes. Our government has known about climate change since before we were alive (we're both millennials). Yet decades of research about the climate crisis and the threat it poses have largely fallen silent in Washington.

Recently, this has begun to change. Led by youth activists and environmental justice groups, environmental politics are swiftly shifting. Rather than offering tweaks to the existing system, people are fighting for fundamental changes to achieve the deep decarbonization that scientists say we need in order to have a chance at limiting global warming to 1.5–2°C. In order to design and implement remedies to our fossil fuel addiction, we must first understand the root causes of this predicament. Many explanations have been put forth to explain climate inaction, from climate denialism, to the power of fossil fuel companies, to claims that addressing climate change goes against human nature.

Climate activists increasingly point to the role of ideology in creating our climate crisis. They have argued that we must transcend neoliberalism, and perhaps even capitalism, to address climate change. The purpose of this paper is to present a coherent account of how neoliberalism has contributed to inaction. To do so, we emphasize three tenets of neoliberal ideology that have stymied action to address the climate crisis:

- 1. <u>Decentralize democracy:</u> A feature of the neoliberal order in the US has been the systematic decentralization of government. Neoliberals have promoted federalism to address "government failure" and subject the state to market forces, exacerbating the race to the bottom in climate policy.
- 2. <u>Defund public investment:</u> Neoliberals dismantled the Keynesian consensus that the state has a major role to play in providing public goods, stabilizing the macroeconomy, and solving coordination problems. In the neoliberal order, government investments are rejected as expensive and wasteful, crowding out productive private investments.
- 3. <u>Deregulate the economy:</u> Neoliberalism has launched a concentrated attack on government's ability to regulate the economy. Ignoring the ability of regulations to positively shape markets, neoliberals dismiss government intervention as "red tape" that merely increases the cost of doing business.



There are merits to each of these tenets, but we argue that their combined effect is to hinder our collective ability to address the climate crisis. Deep decarbonization will require that policymakers shed this neoliberal straitjacket and use the federal government to pursue large public investments and binding climate regulations. Much remains uncertain, including the optimal mix of market-based policies that place a price on carbon and state-based policies that regulate private industry and invest in the green economy, while ensuring a just transition for all workers and communities. However, as the excitement builds around a Green New Deal, it is clear that confronting climate change will require us to confront the ideological system that helped create it.



Introduction

The climate crisis is upon us, but we still have time to act. According to the United Nations Intergovernmental Panel on Climate Change (IPCC), global warming can potentially be limited to 1.5°C (2.7° F) if global net carbon emissions are reduced 45 percent by 2030 and eliminated by 2050 (IPCC 2018). This will be a daunting task. But to understand how the United States might move forward in addressing the climate crisis, it is first helpful to diagnose how, and why, we have come so close to the brink of disaster. The US has failed to adopt a comprehensive plan to decarbonize the economy in line with the recommendations put forth by the IPCC, despite the fact that there is a scientific consensus, with 97 percent of climate scientists recognizing anthropogenic climate change (Cook et al. 2016).

Many explanations have been put forth to help explain climate inaction. For starters, we have downright climate denialism. Climate denialism is the concerted effort to discredit the scientific consensus over anthropogenic climate change. Unfortunately, the denialist story was picked up by many conservatives in the US, including President Donald Trump, who has argued "[t]he concept of global warming was created by and for the Chinese in order to make US manufacturing non-competitive" (Trump 2012). Arguing that climate change is a Chinese hoax is just one flavor of denialism, but there are many, ranging from "it's not happening," to "it's happening, but it's natural," to "it will be *good* for us" (Mann and Toles 2018). These disinformation campaigns appear to be working. Only 35 percent of Republicans believe global warming is caused by human activities, and only 42 percent of Republicans agree that "most scientists believe global warming is occurring" (Brenan and Saad 2018).

As climate denialism becomes an increasingly fringe position, many politicians and lobbyists seeking to prevent action on climate change have moved on to *delay tactics* (Fustafson 2019). Here, the main goal is to prolong the period in which fossil fuels are extracted and combusted. Given the timeline put forth by the IPCC to limit warming to 1.5°C, delay could mean climate catastrophe, yet the Trump administration and fossil fuel groups continue their addiction to fossil fuels, arguing that the country must further delay "costly" and "disruptive" actions to reduce emissions (Kaufman 2019; Savage 2019).

Others champion the dynamic nature of capitalism to solve the climate crisis. Technoenthusiasts argue humans will innovate their way out of the climate crisis *without* government action. Large fossil fuel firms and industry allies have been pushing for

Groups like the Breakthrough Institute can be categorized here. They seek to offer a new approach "in contrast to conventional approaches, focused on regulation and emissions targets and timetables" that emphasize market-based approaches and technological innovation. For more, see https://thebreakthrough.org/about. Many companies also take this stance—most prominently Tesla, under the leadership of Elon Musk.



technology-driven solutions—but not proven fossil fuel substitutes like renewable energy and carbon free mass transit, but rather technologies like carbon capture and sequestration (CCS) that would extend the life of fossil fuels (for more on CCS, see Jenkins 2015). Despite roughly \$4 billion in research and development funds from the US government, the technology has not yet been deployed on a commercial scale (Folger 2014). While there is unquestionably a need for technological advances to fully decarbonize the economy, the notion that policymakers should "wait" to rapidly deploy existing technologies is indefensible.

Stories of denialism, delay, and technological optimism are largely inseparable from the power of the fossil fuel industry. There is clear evidence that fossil fuel companies have known about human-induced climate change since the 1970s. Exxon deployed top scientists to study the issue and report back to senior management. In 1977, Exxon's senior scientist, James Black, told the company that there was "general scientific agreement" that humans were warming the planet "through carbon dioxide released from the burning of fossil fuels." The following year, he told them that humanity "has a time window of five to 10 years before the need for hard decisions regarding changes in energy strategies might become critical" (Banerjee et al. 2015). Exxon's response? It quickly stopped funding climate research and banded together with other fossil fuel companies to create the Global Climate Coalition, a group focused on climate denialism (Greenpeace n.d.). Most of these initiatives have been funded by fossil fuel money, including that of ExxonMobil and the Koch brothers. Their rationale is straightforward: Slow the energy transition so that they can extract and sell fossil fuels. If the US adopts a comprehensive plan to address the climate crisis, these fossil fuels will turn into stranded assets. The stakes are high; according to an analysis by Citigroup, these stranded assets could amount to an estimated \$100 trillion globally (Channell et al. 2015). Others note the figure might be closer to \$20 trillion (Hayes 2014). For context, in 1860 on the eve of the civil war—when chattel slavery meant people were literally financial assets—US slaves represented about \$10 trillion in wealth, in today's dollars (ibid.).

While reforming social systems is no small feat, it is a less Sisyphean struggle than changing human nature itself.

However, the climate crisis cannot be pinned entirely on the fossil fuel industry. Nathaniel Rich argues that "we had an excellent opportunity to solve the climate crisis," but didn't. Rich argues that "human nature has brought us to this place" because "human beings,



whether in global organizations, democracies, industries, political parties or as individuals, are incapable of sacrificing present convenience to forestall a penalty imposed on future generations." While Rich is correct that we are complicit in the climate crisis insofar as we rely on fossil fuels, he ignores the role that political ideology, and particularly the rise of neoliberalism, has played in fomenting the collective shortsightedness he attributes to human nature. In their rebuke of Rich, Mildenberger and Stokes argue, "[t]o explain policy inaction, we can't just look at individuals and human nature" (2018). We need stories that include ideology. If ideology, which is malleable, is to blame, then there may be a way forward. While reforming social systems is no small feat, it is a less Sisyphean struggle than changing human nature itself.

This paper analyzes the impact of three tenets of the neoliberal order: decentralize democracy, defund public investment, and deregulate the economy. We first provide a brief overview covering the rise of neoliberalism, along with an explanation of what we mean by the term. We then present evidence to indicate that each of these mechanisms has undermined the ability of the US to respond adequately to the climate crisis. The goal of the paper is to provide additional insight into understanding how, and why, the government and market have been unable to redirect the economy away from fossil fuels. Next, we provide a discussion of these three mechanisms and explain how neoliberalism does indeed offer a solution to the climate crisis in the form of a carbon price—though we argue that neoliberal ideology itself undermines this solution. Finally, we discuss breaking out of the neoliberal straitjacket that constrains action on climate change. Moving forward will require the federal government to address climate change head-on, rather than exacerbate the race to the bottom of the well by leaving key decisions to state and local governments who are poorly equipped to handle the task. Much remains uncertain, including the optimal mix of market-based policies that place a price on carbon and state-based policies that revive industrial policy by regulating private industry and investing in the green economy. Moreover, any mix of policies must reckon with the distributional implications of this significant economic reorientation. As excitement builds around a Green New Deal, however, it is clear that confronting climate change will require us to confront the ideological system that helped fuel it.

THE RISE OF NEOLIBERALISM

Neoliberalism is an ideology that seeks to put "freedom" at the center of a new social contract. Specifically, it elevates markets as the ideal structure for social allocation and decision-making, and it aims to shrink the role of the state and other democratic institutions in an effort to take as much of the economy out of the public sphere as possible.



Far from being a theory of markets, neoliberalism is a theory of state design. While some have suggested that neoliberalism is a useless catchall term, institutions including the International Monetary Fund now acknowledge the existence, power, and problems of neoliberalism (Ostry et al. 2016). Neoliberal thinkers have worked to dismantle ideas about the role of the state developed during the Progressive and New Deal Eras, to "inoculate capitalism against the threat of democracy" (Slobodian 2018, 2). Prior to the ascent of neoliberalism in the 1970s, the predominant view was that the government acted largely in the public's interest by solving coordination problems in the economy and providing countervailing power against the power of corporations and oligarchs. Neoliberal thinkers, including Friedrich Hayek, Milton Friedman, and James Buchanan worked within the Mont Pelerin Society to replace this vision of the state by theorizing how democratic states undermine individual liberty and advocating a platform to weaken the state through decentralizing democracy, defunding public investment, and deregulating the economy. This set of ideas turned out to be effectively antidemocratic, constraining collective action and allowing the wealthy to capture the state under the guise of market fundamentalism (Mirowski 2014).

While the theoretical foundation for neoliberalism was first developed in the 1940s, it did not reach primetime until the elections of UK Prime Minister Margaret Thatcher in 1979 and President Ronald Reagan in 1980; later, it became a bipartisan affair with the rise of President Bill Clinton and Prime Minister Tony Blair. Unfortunately for the planet, neoliberalism took root just as scientists reached consensus on the causes and consequences of climate change. Some climate activists, writers, and researchers have argued that capitalism, or more specifically neoliberalism, is a major obstacle to the deep emission cuts needed to prevent catastrophic levels of warming (Klein 2015; Parr 2012; Lukacs 2017). But while Figure 1 shows that these ideas captured the interest of the bookreading, book-writing public in the 1980s, it does not prove that the rise of neoliberalism inhibited society's ability to *act* on the climate threat. However, during the 1980s and 1990s, there were tremendous advances in knowledge about potential solutions to climate change, yet actions to mitigate emissions were largely ignored by policymakers, resulting in continuously increasing greenhouse gas emissions (EPA 2019).



While scientists were well aware of the greenhouse effect by the late 1800s, climate change came to a head in the US when Dr. James Hansen, then Director of the Goddard Institute at NASA and now a climate scientist at the Earth Institute at Columbia University, testified to the US Congress that "the greenhouse effect has been detected, and it is changing our climate now" (Hansen 1988).

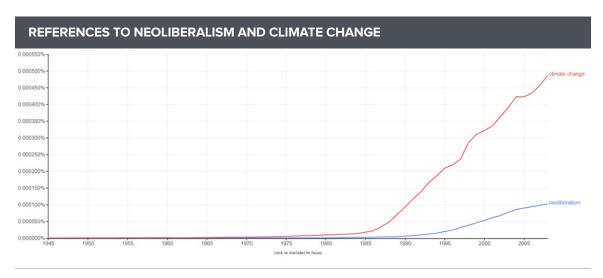


FIGURE 1 Source: Google's Ngram Viewer of references in books to "climate change" and "neoliberal".

Figure 2 plots indexes of fossil fuel extraction and CO2 emissions from 1945 to present, relative to 1980 levels. All four series have increased fairly steadily for decades, with the exception of oil, which declined from 1970 to 2010 but has since recovered to its all-time high thanks to the fracking boom. Fossil fuel extraction and combustion have continued to grow in the neoliberal era despite the growing scientific consensus about climate change.

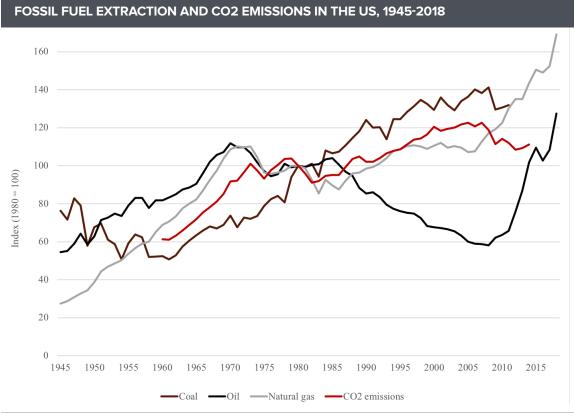


FIGURE 2 Source: Authors' calculations using EIA data on coal production, oil production, and natural gas withdrawals, and World Bank data on CO2 emissions.



Under neoliberalism, there is no alternative to business as usual. The term "business as usual," which the IPCC and climate wonks use to describe a future in which we take no collective action to avert the climate crisis, is itself a neoliberal way of thinking about how we organize the economy. It suggests that people are passive particles of economic forces rather than active agents in determining production and distribution. Neoliberalism has put the blinders on public imagination, hindering our ability to envision, and thus build, a world free from fossil fuels. Francis Fukuyama's book *The End of History* argued that free-market liberal democracies would be the "final form of human government" (Fukuyama 1992). There is a sense that liberal capitalist democracies are the pinnacle of human evolution—even if they lead to the end of civilization as we know it.

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DEFINING NEOLIBERALISM

It is challenging to produce a precise definition of neoliberalism. In their 2009 book, Philip Mirowski and Dieter Plehwe trace the origin of neoliberalism back to its founding thinkers. The collection of essays reveals the breadth and contradictions within neoliberal thought, but as Mirowski's postface concludes, "the market' is posited to be an information processor more powerful than any human brain" so that "the market always surpasses the state's ability to process information" (Mirowski 2009, 435). The flip side of this faith in the market is the neoliberal view that "... democracy, ambivalently endorsed as the appropriate state framework for an ideal market, must in any case be kept relatively impotent, so that citizen initiatives rarely change much of anything" (Mirowski 2009, 436). While classical liberals criticized inequality, "neoliberals see pronounced inequality of economic resources and political rights not as an unfortunate by-product of capitalism, but as a necessary functional characteristic of their ideal market system . . ."

For decades, such thinking was on the fringes of society and academia, but the 1980s allowed for the political ascendancy of neoliberalism. Under neoliberalism, the state was to get



out of the way of the private sector that was operating in a "free market." Grover Norquist famously quipped, "I'm not in favor of abolishing government. I just want to reduce it to the size where I can drag it into the bathroom and drown it in the bathtub." While many have rightly argued that there is no such thing as a "free market" due to government's role as a market-maker, the neoliberal framework held that private firms were more efficient at the production and distribution of goods and services than the government (Chang 2010).⁴

Political economist Jamie Peck argues, "Neoliberalism was a mix of prejudice, practice and principle from the get-go. It did not rest on a set of immutable laws, but a matrix of overlapping convictions, orientations and aversions, draped in the unifying rhetoric of market liberalism" (Burgin 2015, 57). Importantly, there are vital distinctions between neoliberal politics and neoclassical economics, which are often conflated. Neoclassical economics is a school of thought dating back to the 1870s and consists largely of a set of models and ideas built around individual utility maximization; in contrast, neoliberalism arose in the 1940s as a political movement in response to the growing foothold of government in economic planning. With this in mind, we can see some seeming contradictions, such as fossil fuel subsidies. As Niskanen Center President Jerry Taylor points out, "While conservatives are right to rail against subsidies in principle, they manifest hypocrisy when they offer a principled, free market argument against some energy subsidies while silently embracing or ignoring many others" (2016).⁵

With the simultaneous rise of neoliberalism and the climate crisis, many climate activists have blamed neoliberalism for the US's failure to sharply reduce greenhouse gas emissions. For example, in her 2014 book *This Changes Everything: Capitalism vs. the Climate*, Naomi Klein argues that neoliberal policies

"threaten our capacity to respond boldly to this [climate] crisis, from the suffocating logic of austerity that prevents governments from making the necessary investments in low-carbon infrastructure (not to mention firefighting and flood response), to the auctioning off of electric utilities to private corporations that in many cases, refuse to switch over to less profitable renewables" (Klein 2014, 72).



³ As Elizabeth Anderson points out, "a firm is a little communist government in the small 'c' sense because all of the means of production are owned and managed by the government [i.e., the firm] and they use centralized planning" (Klein Podcast 2019)

⁴ An interesting development during this transition was the abandonment of studies related to production. Firms engage in a tremendous amount of planning and use markets internally to a very limited degree. Because of this, neoclassical economics has largely ignored production within firms.

⁵ Note that Taylor is one of the few conservatives that has "switched sides"—going from a leading thinker challenging the scientific consensus on climate change to the founder of a libertarian think tank working to push conservatives to embrace a carbon tax in order to address climate change (Gunther 2017).

In this vein, many activists argue that we must transcend neoliberalism, and perhaps even capitalism, to address the climate crisis (Fleckenstein 2019; Kali Akuno 2019). The purpose of this paper is more modest. Our intention is to present a coherent account of how neoliberalism contributed to inaction on climate change. To do so, we emphasize three tenets of neoliberal ideology that have stymied action to address the climate crisis:

- 1. <u>Decentralize democracy:</u> A feature of the neoliberal order in the US has been the systematic decentralization of government. Neoliberals have promoted federalism to address "government failure" and subject the state to market forces, exacerbating the race to the bottom in climate policy.
- 2. <u>Defund public investment:</u> Neoliberals dismantled the Keynesian consensus that the state has a major role to play in providing public goods, stabilizing the macroeconomy, and solving coordination problems. In the neoliberal order, government investments are rejected as expensive and wasteful, crowding out productive private investments.
- 3. <u>Deregulate the economy:</u> Neoliberalism has launched a concentrated attack on government's ability to regulate the economy. Ignoring the ability of regulations to positively shape markets, neoliberals dismiss government intervention as "red tape" that merely increases the cost of doing business.

These are not the only characteristics of the neoliberal order that have stymied action on climate change. Over the last four decades, the economy has been transformed by financialization and shareholder primacy (Palladino 2019). These changes to corporate governance are hellbent on extracting rents from the economy, and have also undermined climate change mitigation (Jerneck 2017). However, we believe these three tenets are at the core of the ideological case for neoliberalism. Indeed, there are merits to each of these tenets, even if—together—decentralizing democracy, defunding public investment, and deregulating the economy have hindered our collective ability to address the climate crisis. While this paper focuses on the experience of the US, we believe that many of our arguments are also salient in other countries that have embraced these aspects of the neoliberal order.



Note that the three tenets of neoliberalism that we highlight are closely aligned with the three pillars of neoliberalism that Klein (2014) discusses—privatization, deregulation, and tax cuts—as well as Mirowski's (2009) description of neoliberalism as a system that celebrates markets and constrains democracy.

The First Tenet of Neoliberalism: Decentralize Democracy

"Restoring political authority to the separate states offers a firmer basis for future economic growth along with individual liberty."

-James Buchanan, 1995

A central feature of neoliberalism has been the decentralization of democracy. In the US, this has played out through prolonged attacks on "big government," including attacks both on government spending and excessive use of federal power, coupled with an emphasis on state and local control. At the core of these developments is public choice theory, a branch of neoliberal thought that presents government failures as a more pernicious problem than market failures. By pitting jurisdictions against one another, this decentralization of democracy has fueled a race to the bottom, pushing each locality to compete with one another to attract fossil fuel businesses through a series of deregulatory actions and tax breaks; thus, undermining collective action on climate change and constraining government's ability to invest and to regulate.

Neoliberal thought emerged in response to the rise of economic planning in the early 20th century, from the Soviet Union's five-year plans to the US's New Deal. Friedrich Hayek's 1944 book *The Road to Serfdom* contends that planning leads society down a slippery slope towards despotism, but his 1945 paper "The Use of Knowledge in Society" provides a more analytical argument against planning. Hayek (1945) argues that market economies outperform planned economies because they make better use of decentralized information. A central planner with perfect information about technologies, resources, and preferences could theoretically maximize public welfare, but Hayek argues that this knowledge is, in fact, widely dispersed and impossible for a central authority to obtain. The productive power of market economies is that they allow people—scientists, consumers, entrepreneurs—to make productive use of local, private knowledge without detailed information about the full range of economic possibilities beyond relevant market prices.



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Neoliberalism also advocates decentralized governance to subject government to similar market discipline. From its founding, the federal government of the US has provided state and local governments significant political autonomy. In theory, smaller jurisdictions serve as "laboratories of democracy," in which successful experiments are adopted by other jurisdictions and the federal government. A recent example of this was the design of the Clean Power Plan under the Obama Administration, through which the EPA drew up broad guidelines but left a great deal of decision-making power up to state actors. However, in practice, this decentralization of democracy has undermined action on climate change by shifting the cost of global public goods, along with the regulatory burden, onto local governments.

Public choice theory argues that the decentralization of democracy promotes freedom and limits the size and power of government. James Buchanan and Gorden Tullock's 1962 book *The Calculus of Consent* argues that citizens actively support plans that provide them with large private benefits but only weakly resist plans that burden them with minor private costs, so that "majority voting will . . . tend to result in an overinvestment in the public sector when the investment projects provide differential benefits or are financed from differential taxation" (Buchanan and Tullock 1962, 171). Neoliberals turn to federalism because "decentralization provides one means of introducing marketlike alternatives into the political process" (Buchanan and Tullock 1962, 114). By providing people—and, more importantly, capital—with exit options, ". . . the separate states of a federal system would be compelled by the forces of competition to offer tolerably 'efficient' mixes of publicly provided goods and services" (Buchanan 1995, 22).

The argument in public choice theory for decentralizing political power within countries echoes Hayek's 1939 case for enforcing free trade between countries in his paper "The Economic Conditions of Interstate Federalism." This neoliberal order constrains governments' role in the economy because the free movement of capital discourages



jurisdictions from taxing or regulating business. Thomas Friedman's 1999 book *The Lexus and the Olive Tree* refers to this as a "Golden Straitjacket" that narrows "political and economic policy choices" because "the tighter you wear it, the more gold it produces" (Friedman 2012, 106). But decentralization can also lead to a race to the bottom in the provision of social services (Oates 1972). Its effect on climate change is even more dire, since the costs of carbon mitigation are local, while the benefits of addressing climate change are global.

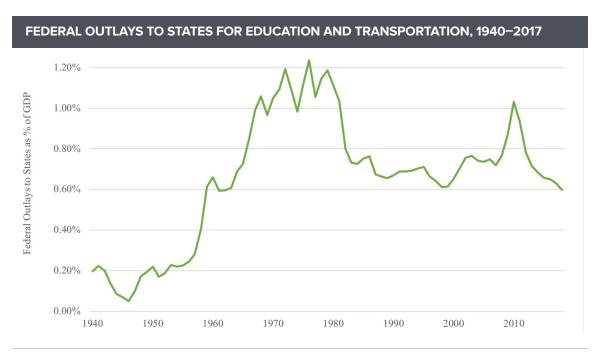


FIGURE 3 Source: Office of Management and Budget 2019. Table 12.2. https://www.whitehouse.gov/omb/historical-tables/

Under the Reagan administration, the federal government cut funding to state and local governments and intensified fiscal competition between them (Swartz and Peck 1990). As shown in Figure 3, federal funding for transportation and education was cut by a third in the 1980s, where it has remained for most of the last four decades. This "new federalism" hampered cities' and states' ability to decarbonize their economies just as the public learned about the threat of climate change. The effects linger on despite growing awareness of the climate crisis. Today, the mayors of over 400 cities, representing 70 million Americans, have committed to upholding the goals of the Paris Agreement (Climate Mayors 2019). However, these local jurisdictions have limited policy tools to address climate change. Investments in renewable energy, building retrofits, and mass transportation are expensive and compete for funding with education and roads.



Even revenue-neutral policies are difficult to pass at the local level given the free flow of capital. For example, Boulder, Colorado has a climate action plan that includes a tax on electricity, which comes mainly from coal-fired plants. It taxes residential consumers at \$0.0049 per kWh, raising their prices about 4 percent. However, due to business opposition, the plan taxes commercial consumers at just \$0.0009 per kWh and industrial consumers at just \$0.0003 per kWh (Boulder Climate Action Plan 2018). The progressive people of Boulder may care about climate change, but in a competitive environment they are unable or unwilling to raise businesses' electricity costs even 1 percent.

By decentralizing democracy, neoliberalism has exacerbated the race to the bottom. The struggle to address climate change requires global cooperation. Unfortunately, the decentralization of democracy in the neoliberal era rewards competition, rather than solidarity, between political jurisdictions. Free trade between states and federalism within states expands the marketplace to the political sphere and undermines climate action. As we will see in the next two sections, decentralized political power also undermines public investment and regulation.

The Second Tenet of Neoliberalism: Defund Public Investment

On truly economic grounds, government spending is adverse to productivity, not favorable to productivity.

-Milton Friedman, 2001

There are many areas of the economy where the private sector will systematically underinvest—education, transportation, basic research and development, etc. Adequately investing in public goods requires a public actor—namely, the government. For the better half of the 20th century, the US government took this role seriously, unleashing major public investments that would reshape not only the country but also the world. During this time, the Keynesian consensus held that the state has a major role to play in providing public goods, stabilizing the macroeconomy, and solving coordination problems throughout the economy. But neoliberals had an alternative vision of the state—one where public investment was to be minimized, for government investments were thought to be expensive and wasteful, crowding out productive private investments. Thus, by undermining



public investment, neoliberal ideology has severely limited the set of tools available to policymakers to set the economy on a path to decarbonization.

During the dark days of the Great Depression in the US, a vital debate emerged: Should the government play a more active role in managing the economy? While the government played a relatively minor role in terms of investment and the management of aggregate demand in the economy prior to the Great Depression, things were about to change. The ideas of British economist John Maynard Keynes were starting to shake the economics profession to its core, unsettling many long-held beliefs in classical economics. Keynes argued that economists had it backwards, rejecting the idea that supply creates its own demand—a foundational principle in classical economics. By arguing that demand, driven in some instances by government spending, can increase supply, Keynes effectively put forth a theory of how state spending could benefit, rather than detract from, the private realms of the economy. Importantly, he went to great lengths to develop an alternative theory of the state, in which it played a central role in managing the economy, addressing coordination problems and promoting economic growth through investments and the provision of public goods. The Keynesian consensus, starting in the 1930s, led to direct government investments aimed at transforming and expanding the economy, many of which continue to have enduring benefits today.

Transformative government-supported investment projects have been a lynchpin in the US's development as a high-income, but fossil-fuel-dependent, economy. One such example is the Rural Electrification Administration (REA) created in 1935 by President Franklin D. Roosevelt. In just a five-year period, the REA provided subsidized loans to newly-established, cooperatively-owned utilities that would electrify much of the countryside. With the \$3.6 billion in loans in hand (2010 dollars), rural utilities were able to construct more rural electrical lines than private companies had put up in the previous 50 years. Not only did this double the number of farms with electrical service, it also had a long-lasting positive effect on the stabilization and growth of farm production (Kitchens and Fishback 2013).

An example from a Republican administration is the Federal Highway Act of 1956, which was signed into law by President Dwight D. Eisenhower. The initial authorization provided funding for the construction of 41,000 miles of the interstate highway system across a 10-year period, requiring an investment of about half a percent of annual GDP. This investment revolutionized the American economy and opened up new economic possibilities, spurring private-sector investments that would have been unthinkable in the absence of this critical infrastructure. In 2011 alone, 16 billion tons of cargo moved across the nation's highways. In total, economists estimate that the project contributed roughly 21 percent to the annual productivity growth rate (Erickson 2012).



But wide-scale support for the government to support transformative investments would not last. Neoliberals argued that public investment posed a serious threat to the long-term well-being of the economy—and to "freedom" itself. By returning to many of the principles of neoclassical economics, neoliberal thinkers sought to severely constrain the state's ability to engage in large-scale public investments, arguing that such investments were inefficient and would simply bankrupt the country (Friedman and Friedman 1979). By waging a war on government spending, neoliberal thinkers worked to ensure that "the age of John Maynard Keynes gave way to the age of Milton Friedman" (John Kenneth Galbraith in Burgin 2015, 155). Milton Friedman claimed to be "deeply concerned about the danger to freedom and prosperity from the growth of government" starting with the New Deal and continuing through the post-WWII Great Society (Friedman 2001). According to historian Angus Burgin, Friedman argued that markets "constituted the only truly progressive social order, and the negative freedom they enabled would generate the best possible outcome for America's most humble residents" (Burgin 2015). Government encroachment on these "private" markets through expansion of government investments thus represented a serious threat to Friedman's conception of freedom.

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The rejection of the Keynesian vision for government's role in the economy followed from a critical assumption: Neoclassical economics assumes that the market economy is self-correcting and operates normally at full capacity—efficiently utilizing all resources at its disposal, including labor (Mason 2017).⁷ Thus, when government directs resources through spending, it crowds out private investment by raising interest rates. By promoting the idea that there exists direct competition, rather than synergy, between state and private investments, neoliberal ideology lays strong groundwork for defunding public investment (Mazzucato 2015). Friedman was clear on this point, arguing that there was "no doubt that



⁷ As an example of how this has changed in contrast with the golden era of capitalism, we can look at unemployment rates. Today, "full employment" unemployment rates are usually around 5–6 percent according to the Federal Reserve. During much of the golden age, unemployment in the US hovered around 3 percent, yet at that time the US was thought of as a "high" unemployment society.

the Pentagon funding has led to research, but you don't know what would have been done with that money if the government hadn't been spending it" (Friedman 2001).

With the decline of Keynesianism and the rise of neoliberalism, the US entered an era of anemic public investment.

Neoliberal thinkers fought to minimize the role of the state in the economy to unleash the efficient forces of the market while simultaneously supporting individual freedom (Friedman 1979). Friedman and Friedman go on, arguing

"[t]hough the United States has not adopted central economic planning, we have gone very far in the past fifty years in expanding the role of government in the economy. That intervention has been costly in economic terms. The limitations imposed on our economic freedom threaten to bring two centuries of economic progress to an end" (1979).

With the decline of Keynesianism and the rise of neoliberalism, the US entered an era of anemic public investment, as depicted in Figure 4. As of 2018, US federal government nondefense investment was 43 percent below 1967 levels—falling from over 2.5 percent of GDP in the 1970s to under 1.5 percent. This decline was initiated swiftly once Reagan took office and began implementing his neoliberal vision. In particular, the US experienced a significant decline in large-scale public works projects that were based on a long-run view of investing in public goods and the economy at large (US Department of the Treasury 2014). The lack of investment in US infrastructure may cost the economy about \$4 trillion in GDP and \$7 trillion in lost business sales between 2016 and 2025 (ASCE 2013; ASCE 2016)—without accounting for the costs of climate change. Importantly, the shift in the dominant economic paradigm affected the range of perceived viable possibilities for government action in response to long-term systemic challenges such as climate change.



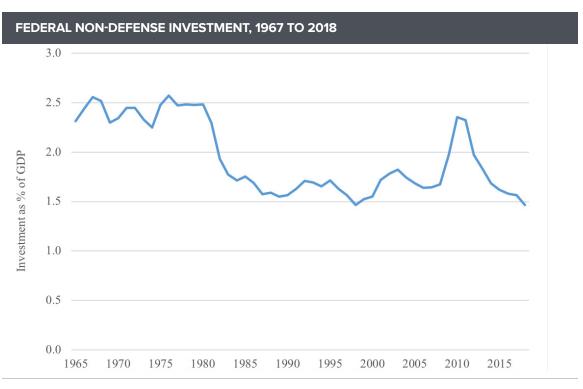


FIGURE 4 Source: https://www.cbo.gov/system/files/2019-06/55375-Federal_Investment.pdf

Government expenditures in the US significantly lag behind other high-income countries. As a percentage of GDP, US government spending is 50 percent lower than France, 31 percent lower than Sweden, and 15 percent lower than Germany. In fact, in terms of government spending, the US comes in right behind Latvia (OECD n.d. A). Looking specifically at infrastructure investments, the US lags even more, investing just 0.5 percent of GDP per year in infrastructure compared to France (0.8 percent), the UK (1.0 percent), Norway (1.5 percent), or China (5.8 percent) (OECD n.d. B).

Over the past four decades, low levels of public investment have had devastating implications for the climate. The longstanding assumption that self-correcting markets keep an economy operating at full capacity has left American politics with a mistaken vision of economic scarcity. In the neoliberal worldview, public investment in decarbonization would cost jobs and slow economic growth. According to this logic, we cannot have an economy that is both strong and sustainable. The neoliberal vision is that we must "tighten our belts" and give up some of our current income to invest in the well-being of future generations (Broome 2012). While some have pushed back against this, citing benefits to the current generation from acting on climate change (Boyce 2018; Ackerman 2017; Paul et al. 2019), the larger climate debate has failed to move beyond a simple framework in which the growth path is pre-determined and fixed.



The Third Tenet of Neoliberalism: Deregulate the Economy

I've put a freeze on pending regulations and set up a task force under Vice President Bush to review regulations with an eye toward getting rid of as many as possible.

-President Ronald Reagan, 1981

The third tenet of neoliberalism is deregulation, which seeks to neutralizes the collective power of the people, exercised through the state. The concentrated attack on government's ability to regulate the economy has proved devastating in the climate fight. By amassing an ideological vision of regulation as little more than "red tape," which merely increases the cost of doing business, neoliberal thought leaders have effectively tied policymakers' hands behind their back when it comes to cleaning up our environment. Neoliberals noted that regulations could at times be effective at reducing pollution, but asked at what cost? Emphasizing the idea that "free markets" are largely self-correcting, and government failures are rampant problems in the economy, then the logical solution is to deregulate the economy, allowing firms and individuals the maximum choice—including the "choice" to live in a clean or a polluted neighborhood. This line of thinking was rampant in the Chicago School of Economics, which emphasizes the distortions associated with the regulation of markets.

Neoliberal thinkers rejected the regulatory state built during the Progressive and New Deal Eras, when the state greatly expanded its management of markets. "Until the New Deal, regulation of and intervention in economic arrangements by government, and especially central government, were minimal" (Friedman and Friedman 1979, 228). Progressive Era thinkers and New Dealers saw the market economy not as a natural "free market," but as a social institution that must be managed to promote the public good (Polanyi 1944). The regulatory power of the state was put to the test under President Theodore Roosevelt, who sought democratic control over outsized private corporations that wielded market power to enrich themselves at the expense of everyday Americans (Rahman 2017, 68). Progressives came to believe that "regulation is not a matter of market failure and regulatory gaps, but rather a deeper problem of concentrated economic and political power" (Rahman 2017, 20). Through the regulatory reforms enacted during the New Deal, we came to see the regulatory powers of the state as a tool to address imbalances of economic power.

The regulatory role of the state was soon besieged by the rise of neoliberal ideology. Led by



the Chicago School of Economics, home to Milton Friedman, George J. Stigler, and Gary S. Becker, neoliberal thinkers built their case that state regulation is ineffective and unjust. At the time, most economists and policymakers agreed that the state had a significant role in using its regulatory power to address both market failures and the outsized power of corporations. Stigler's seminal work on regulation introduced the idea of regulatory capture—namely, that state regulators are easily corrupted by monied interests, so that state regulations tend to benefit large corporations, rather than the public writ large (Stigler and Friedland 1962; Stigler 1971).

Others in the neoliberal school agreed that the regulatory role of the state was a serious problem. Friedman discussed the case of abolishing environmental regulations in an interview with Phil Donahue in 1979 (Friedman 1979). When Donahue suggested that Friedman would not possibly "condemn regulations regarding emissions," Friedman interrupted, "Of course I'm going to condemn them." That same year, Milton and Rose Friedman argued that the Environmental Protection Agency, established earlier in the decade, employs "over 12,000 persons to issue regulations and orders, most of which require the use of more energy." They continue, "Each [regulatory agency] grinds out rules, regulations, red tape, forms to fill in that bedevil us all" (1979, 292). To the Friedmans, regulatory agencies were inefficient and prone to capture by special interests, and they argued that they should be abolished and replaced by a price mechanism (1979, 216-217).

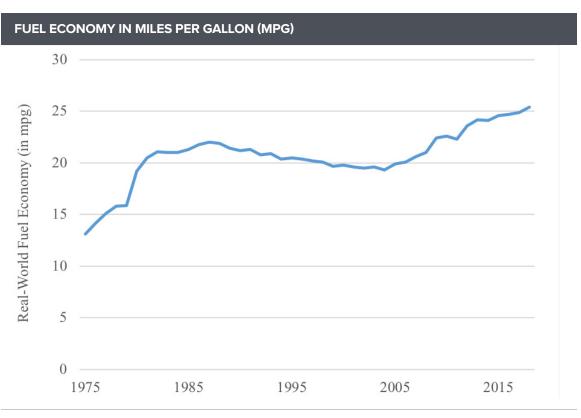
Reagan entered the White House with bold promises to smash the regulatory state and free the market. Reagan appointed James Watt to head the Department of Interior and Anne Gorsuch—mother of Supreme Court Justice Gorsuch—to head the Environmental Protection Agency. Never before had these agencies been headed by two individuals with a deep desire to roll back environmental protections and allow polluters to do as they please (Little 2004). The administration also worked to eliminate the Department of Energy, although they ultimately settled for deep cuts to its clean energy programs (Johnstone 2011). The Reagan administration also worked to "simplify" the tax code, which "eliminated financial incentives for conservation and alternative energy technologies while retaining existing subsidies for oil and gas and for nuclear power" (Starrs, 1988: 118). These steps led to a lost decade at a time when evidence was mounting about the causes and consequences of climate change. Unfortunately, the current administration is dedicated to the continued rollback of environmental regulations, having taken over 100 actions to repeal or weaken climate regulations to date (Popovich et al. 2019; Paul and Rupp 2019).

Today, the US lags behind other high-income countries in deploying regulations to reduce greenhouse gas emissions. This regulatory inaction is partly responsible for the US inability to address the climate crisis. Consider two examples: vehicle fuel efficiency standards and renewable portfolio standards—two important regulatory policies to reduce emissions from



the transportation and electricity sectors.

One of the most successful environmental regulations to date in the US is the Corporate Average Fuel Economy (CAFE) standards. First passed by Congress in 1975, just before its turn toward neoliberalism, the CAFE standards had a sizable effect on the fuel efficiency of the transportation sector—now the largest-emitting sector in the economy. As a result of those standards, as well as higher prices for gasoline following the oil embargoes, average miles per gallon increased 63 percent between 1975 and 1985, as shown in Figure 5. However, this dramatic improvement in efficiency was followed by inaction in the neoliberal era. The Reagan administration wasted no time rolling back tighter fuel efficiency standards established by the National Highway Traffic Safety Administration, which initially pushed for fuel efficiency standards which would have reached 48 miles per gallon (MPG) by 1995. Presidents Reagan, Bush, and Clinton largely ignored CAFE standards as a regulatory tool to decrease emissions, improve air quality, and save consumers money. Thus, during the heyday of neoliberalism, CAFE standards were not tightened for 25 years, and average fuel economy actually declined as Americans shifted towards larger, more powerful vehicles.







Recently, the ice has begun to thaw—a bit. As part of the Energy Independence and Security Act of 2007, Congress tightened CAFE for cars, light trucks, and SUVs to a combined average of 35+ MPG by 2020, an improvement of 10 MPG. But compared to many other countries, the US lags behind. By 2010, cars in the US emitted more ${\rm CO_2}$ per kilometer than many other countries, including Brazil, India, Japan, Mexico, South Korea, and the European Union. Recognizing the fact that the US was behind the curve, President Obama was able to work with state regulators and the EPA to ratchet up CAFE standards, this time to an average of 54.5 MPG by 2025. If those regulations were fully enacted, US cars would still emit 25 percent more than European cars in 2025 (ICCT n.d.). But the current administration is freezing fuel efficiency standards at 2021 levels, allowing the US to lag even farther behind other countries.

Another noteworthy example is the failure to deploy nationwide renewable portfolio standards in an effort to decarbonize the electricity sector—the second-largest polluting sector in the economy (EPA 2019). Renewable portfolio standards are regulations that require electrical utilities to obtain a certain percentage of their energy from renewable sources—ranging from the single digits to 100 percent renewable energy. Renewable portfolio standards have been used around the globe to decarbonize the electricity sector. As of 2017, at least 67 countries enforce targets for renewable capacity or generation (Heeter et al. 2019). In the US, renewable portfolio standards have been deployed in 29 states and the District of Columbia, and these laws account for roughly half of the growth of the US's total renewable energy generation since 2000 (EIA 2019; Heeter et al. 2019).

However, the US has failed to pass a national renewable portfolio standard, which would help rapidly transition the economy away from fossil fuels. Instead, the current administration is working to roll back federal policies by replacing the Clean Power Plan with the Affordable Clean Energy Rule (EPA 2018). According to the EPA's own calculations, this regulatory change will generate tens of thousands of new asthma cases annually and result in 1,400 premature deaths a year (Friedman 2018). Figure 6 shows that the US is already lagging behind many other countries in decarbonizing its electricity sector. The US now generates just 7 percent of its electricity from renewable sources (excluding hydropower), compared to 9 percent on average in OECD countries, 17 percent in the European Union, and over 20 percent in countries ranging from Germany to Costa Rica. This largely reflects the failure of the US to adopt stronger regulations for the electricity sector.



FIGURE 6 Notes. This measure of renewable sources excludes hydropower. Source: <u>International Energy Agency</u> (via World Bank and <u>ourworldindata.org</u>).

If policymakers are to put the country on a path to rapid decarbonization, then no policy levers can be left on the table. While regulations are often derided as "red tape" or "second-best policies," they are frequently the best way forward. In fact, the Clean Air Act and its amendments have been shown to be major drivers of innovation—often reducing emissions more cheaply than market mechanisms (Rubin et al. 2004). Further, environmental regulations such as renewable portfolio standards are popular (Stokes and Warshaw 2017). The neoliberal consensus writes off the idea that government regulation can be beneficial on ideological grounds, despite significant evidence to the contrary.



Conclusion

These three tenets of neoliberalism—to decentralize democracy, defund public investment, and deregulate the economy—seriously constrain collective action on climate change. While there are reasonable defenses of each of these principles in theory, they prevent action on climate change in practice. These ideological commitments make it difficult to engage in collective action (such as signing onto international climate accords), invest in green infrastructure, or rewrite the rules governing energy and the economy. Ironically, neoliberal ideology also undermines faith in the neoliberal solution: putting a price on carbon. Our best chance at tackling the climate crisis may well be to transcend neoliberalism.

WHY NO CARBON PRICING?

Given the three tenets of neoliberalism, we must ask what is to be done about climate change in a neoliberal world. Interestingly, neoliberals do indeed provide an answer. Mirowski describes the neoliberal view:

"The market (suitably reengineered and promoted) can always provide solutions to problems seemingly caused by the market in the first place. This is the ultimate destination of the constructivist orientation within neoliberalism. Any problem, economic or otherwise, has a market solution, given sufficient ingenuity: pollution is abated by the trading of emissions permits," etc. (Mirowski 2009, 189).

In this sense, putting a price on carbon is the ultimate neoliberal policy. If combusting fossil fuels generates a negative externality responsible for the climate crisis, then the market solution is to price it, through either a carbon tax or a carbon cap. The government would have a role to play in determining the tax level and how to direct the revenue—paying down the debt, cutting other taxes, rebating it to the people in equal carbon dividends, etc.—but neoliberal ideology theoretically supports internalizing the cost of climate change.

Conservative economist Gregory Mankiw has urged economists to join the "Pigou Club" and tax carbon (Mankiw 2006), and the vast majority of economists have done just that. Not a single economist in the University of Chicago's IGM's poll of economic experts disagreed with a proposal to raise revenue through a carbon tax instead of a labor tax (IGM 2012).8 A large group of eminent economists recently called for a "sufficiently robust and gradually rising carbon tax" to fund a carbon dividend (Akerlof et al. 2019). However, while most



⁸ We should note that the purpose of a carbon tax should not be to raise revenue, but to price in the externality and reduce GHG emissions.

economists overwhelmingly support a carbon tax, most of them support a very low tax in the range of \$20–\$50 per ton of ${\rm CO}_2$. A carbon price in that range will not put the economy on a path to decarbonize fast enough to keep global temperatures from rising more than 1.5–2°C—not even close. According to the DICE model, a carbon price would need to be \$230 today to limit warming to 2.5°C (Nordhaus 2017), and, according to the recent IPCC report, a carbon price needs to be \$135 to \$5,500 to limit warming to 1.5°C (IPCC 2018). The open letter also proposes pricing carbon in exchange for deregulation, in line with neoliberal thought.

While pricing carbon is the perfect neoliberal solution for climate change in theory, it has been an abject failure in practice. In the US, just 10 states have a carbon price, all are low, and only one covers emissions beyond the electricity sector. Internationally, more than 40 countries have adopted carbon pricing, but the average price is just \$8 per ton of CO_2 (OECD 2018). Despite the consensus amongst economists and environmental wonks to price the externality through a carbon tax, such action remains dead on arrival in Washington. Why that is the case has been plaguing researchers and policymakers for decades now (Skocpol 2013; Klenert et al. 2018). Proposed explanations include 1) the transparency and salience of carbon pricing (Rabe 2018); 2) the regressivity of carbon pricing that burdens the poor more than the rich (Boyce and Riddle 2011; Fremstad and Paul 2019) 9 ; 3) lack of grassroots support (Skocpol 2013); and 4) deep-seated aversion to taxes (Carattini et al. 2018).

While there are kernels of truth within all of these explanations, we believe the central failure is caused by neoliberalism itself. Ironically, buying into neoliberal ideology undermines faith in the neoliberal solution, such as the carbon tax. While neoliberal thinkers acknowledge the role of government in internalizing externalities in academic writings (Buchanan and Tullock 1962, 38-39), those arguments were never popularized among policymakers. Further, neoliberal ideology weakened both the government and people's faith in government, hindering the government's ability to address collective action problems like climate change. This suppression of government power opened the door for the rise of corporate power (Abernathy et al. 2019).

Ironically, buying into neoliberal ideology undermines faith in the neoliberal solution, such as the carbon tax.



Depending on how the revenue from a carbon tax is used, the final result may be either regressive or progressive.

¹⁰ However, regressivity has not stopped other recent reforms to the tax code, including the large and deeply regressive Tax Cuts and Jobs Act of 2017 passed by the Republican Congress and signed into law by President Trump (Huang et al. 2017).

Unfortunately, the rise of neoliberalism has fueled inaction at a time when we need all hands on deck to combat the climate crisis, and it has systematically undermined government's ability to address the crisis. Importantly, neoliberalism simultaneously opened the gate to climate denialism, further poisoning our collective ability to respond to the crisis at hand by unleashing corporations' ability to influence politics, policy, and the national dialogue (Brulle 2014; Farrell 2016). While climate denialism and delay tactics are widespread, they originate in the US—home to the neoliberal thought collective (Dunlap et al. 2011; Mirowski 2014). This opens up an interesting thought experiment: If neoliberalism had never become the dominant ideology, would climate denial and delay tactics have had the same effect? Would fossil fuel companies be able to capture the political system and effectively derail local, state, and federal action to mitigate emissions? While we cannot decisively conclude what would have happened, research suggests that stronger democracies that exhibit less corruption have lower levels of carbon emissions and more stringent environmental regulations (Povitkina 2018; Neumayer 2002).

Although carbon pricing is *the* prescribed neoliberal solution, it remains an elusive policy under neoliberal regimes. Democrats have increasingly abandoned carbon pricing due to the left's assertion that it is a neoliberal policy, raising prices in the economy without providing necessary investments to fully decarbonize the economy and provide workers and communities with a just transition. Republicans, long opposed to increasing taxes and "expanding government," remain skeptical of climate change itself, and policies such as a carbon price. Thus, carbon pricing remains a solution on the sidelines—a result that continues to puzzle economists.

ESCAPING THE NEOLIBERAL STRAITJACKET

To shed austerity climate politics, we must begin by rejecting the neoliberal worldview. Viewing the climate crisis through neoliberal glasses has brought us to the brink of catastrophe—fueling inaction by undermining government's ability to craft and execute climate solutions and promoting the false trade-off between environmental protection and economic security (Paul et al. 2019). The creation of the scarcity narrative—that the economy is operating at full capacity, and thus addressing climate requires serious sacrifices—has been fueled by the neoliberal order. But, even if this weren't the case, neoliberals have long argued that government simply isn't up to the job, and if it tried, it would be impeding on individual freedom. We reject this framing, where government's actions are limited to pricing in negative externalities. Instead, if we are to break out of the neoliberal straitjacket, we must adopt a new framework.



Viewing the climate crisis through neoliberal glasses has brought us to the brink of catastrophe—fueling inaction by undermining government's ability to craft and execute climate solutions and promoting the false trade-off between environmental protection and economic security.

Far from being an abstract ideological discussion amongst economists, this ideological battle has broken into the mainstream. The Green New Deal—a decisively anti-neoliberal agenda—has flatly rejected neoliberal climate politics and policy, instead creating new space centered around the mass mobilization of our collective resources to simultaneously combat the climate crisis while enhancing economic security. Green New Dealers have learned from history, acknowledging that in some instances, such as when the US decides to mobilize resources for war efforts, the logic of austerity is disregarded. FDR's "Arsenal of Democracy" fireside chat epitomized this view:

But all of our present efforts are not enough. We must have more ships, more guns, more planes—more of everything. And this can be accomplished only if we discard the notion of "business as usual." This job cannot be done merely by superimposing on the existing productive facilities the added requirements of the notion for defense. Our defense efforts must not be blocked by those who fear the future consequences of surplus plant capacity. The possible consequences of failure of our defense efforts now are much more to be feared. And after the present needs of our defense are past, a proper handling of the country's peacetime needs will require all the new productive capacity, if not still more. No pessimistic policy about the future of America shall delay the immediate expansion of those industries essential to defence. We need them (Roosevelt 1940).

Green New Dealers frequently draw parallels between mobilization efforts to fight WWII and those needed to combat the climate crisis. If we are to have any chance at limiting global warming to 1.5°C, government must take a leading role in coordinating economic activity away from business as usual and toward a green economy. Importantly, this means leaving no policy tools on the sidelines.

One reason for the popularity of the Green New Deal is its clear rejection of the three tenets of neoliberalism. First, it dismisses the notion that democracy should be decentralized and instead calls for bold federal-led efforts to address the climate crisis. Acknowledging that state and local government power is limited, especially when it comes to mobilizing and financing societies' productive resources, the Green New Deal clearly embraces an



expansion of the federal government's role.

Second, the Green New Deal wholeheartedly embraces a Keynesian economic position, rejecting the past 40 years of austerity. While details still need to be fleshed out, Democrats running for president have proposed federal spending in the range of \$3–16 trillion dollars to combat the climate crisis. This represents a complete reversal of recent trends to defund public investment. Given current macroeconomic conditions, we have argued that the spending associated with the Green New Deal would be a feature, not a bug of a decarbonization program (Paul et al. 2019). Changing the dominant economic paradigm through which we consider action on climate also fundamentally alters our understanding of the "costs" and "benefits" associated with the transition. While action on climate change is repeatedly framed as a cost, many Keynesian economists reject this notion, arguing that "when output is limited by demand, action on climate change doesn't require sacrifices" (Mason 2018b). In other words, state support for aggregate demand can improve the growth trajectory of the economy, providing new space to build the green economy of the future.

Finally, the Green New Deal also embraces the need for environmental regulation (Paul et al. 2019). Regulations have been some of our most powerful tools to date in reducing emissions and combating environmental harms and must be widely deployed once again. One area that is still open for debate within the Green New Deal is the role for carbon pricing. While some have argued in favor of including a carbon price as part of the Green New Deal to leverage price signals in order to change the terms of trade between the dirty and green economy (Fremstad and Paul 2018), others worry that carbon pricing is a neoliberal tweak that undermines the bold climate agenda necessary to support rapid decarbonization (Edwards 2018). We agree that a decarbonization program cannot solely rely on carbon pricing, but that it should be an integral part of a Green New Deal (Paul et al. 2019). In order to overcome political obstacles and mistrust associated with carbon pricing, policymakers would be wise to combine them with public investments that ensure a just transition for all workers and communities.

This paper analyzes the impact of three tenets of the neoliberal order: decentralize democracy, defund public investment, and deregulate the economy. We present evidence to indicate that each of these mechanisms has undermined the ability of the US to respond adequately to the climate crisis. The goal was to provide additional insight into understanding how, and why, the government and market have been unable to redirect the economy away from fossil fuels. Moving forward will require the federal government to address climate change head on, rather than exacerbate the race to the bottom by leaving key decisions to state and local governments who are poorly equipped to handle the task. Much remains uncertain, including the optimal mix of market-based policies that place a price on carbon and state-based policies that revive industrial policy by regulating private



industry and investing in the green economy, while addressing head on the distributional implications of this significant reorientation of the economy. However, as the excitement builds around a Green New Deal, it is clear that confronting climate change will require us to confront the ideological system that helped create it.



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