

Coercing Finance to Fund Decarbonization:

The Democratic Case for Coercion in Funding the Green Transformation

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Abstract

Insofar as governments want to secure a *democratic* green transformation, attention must be paid not only to which policy approach will be effective, quick, or cheap, but also to which policy approach preserves the power of citizens to coerce private agents through public policy. I defend this claim using the work of Scott Anderson on coercion. While much democratic theory focuses on the necessary limits to a state's coercive powers, I suggest we must also consider the need to preserve those powers over time. I argue that the state has good reason to engage in coercing private finance to fund the green transition. If it doesn't, a pattern of nudging or attracting investment will bolster private financial agents' power and in so doing, undermine the state's coercive power that is foundational to a healthy democracy.

Keywords: Coercion, Democratic Theory, Green Transition, Macrofinancial Policy, State Capacity

"The most significant fact about government is that government coerces."

Theodore Lowi¹

It will require gargantuan efforts of collective action to transition the entirety of the world's energy infrastructure in the time required to stave off climate catastrophe. As this special issue recognizes, there is an emerging consensus that the state will need to play a role in coordinating this collective action.² This is true nowhere more than in the case of finance.³ Private efforts to fund the green transition have fallen significantly short of what is required. In the literature, this is known as the green finance gap.⁴ It falls to the state to ensure the gap closes. What is far from clear, however, is what form the required state intervention should take in its effort to close this gap.⁵ Governments might decide to *nudge* private investors to invest in the green transition by requiring corporations to make climate related disclosures, for instance. Instead, they might decide to *attract* or bribe private investors by offering incentives or derisking investment opportunities. Or perhaps governments will *coerce* private investors using taxes or regulation.

There are a variety of factors each government will have to consider in making these decisions, not least of which are effectiveness, speed, and cost.⁶ These are not my concern in this paper. Rather, here I focus on democratic considerations. Insofar as governments want to secure a *democratic* green transition—or a *just* green transition for those who believe justice requires democracy—attention must be paid not only to which policy approach will be effective, quick, or cheap, but also to which policy approach preserves the power of citizens to collectively coerce private agents through public policy.⁷

¹ Lowi, "Four Systems of Policy, Politics, and Choice," 299.

² Green, "Comparative Capitalisms in the Anthropocene: A Research Agenda for Green Transition."

³ This is not to say that the role of the state is not important, even essential, in instigating the required interventions to secure a green transformation in other sectors.

⁴ Hafner et al., "Modelling the Macroeconomics of a 'Closing the Green Finance Gap' Scenario for an Energy Transition"; Campiglio, "Beyond Carbon Pricing."

⁵ See both Driscoll and Blyth and Lund-Larsen in this issue. See Eich (this issue) for an argument that the state should be acting not to close the gap but to change existing financial structures and incentives more fundamentally, an argument in tune with recent IPE research including Bailey, "Re-Thinking the Fiscal and Monetary Political Economy of the Green State."

⁶ Many of which IPE scholars consider elsewhere, including in this issue: Green, "Comparative Capitalisms in the Anthropocene: A Research Agenda for Green Transition"; Craig, "'Treasury Control' and the British Environmental State"; Svartzman and Althouse, "Greening the International Monetary System?"

⁷ For instance: Allen, *Justice by Means of Democracy*

To put it differently, in this paper I argue that to secure a *democratic* green transition, the state must coerce private financial agents, rather than just nudging or bribing them.

My focus in this paper is on the relationship of the state to private finance. This is, in part, of course, because this special issue sets out to address the ins and outs of funding the green transformation. It is also for a much deeper reason. I will argue in this paper that foundational to sustaining a healthy democratic state is the maintenance of the state's coercive powers. Furthermore, I argue that adopting a policy stance that is by and large not coercive can cause the state's coercive powers to erode.⁸ Private finance is an area of policy marked by an historical trend of states choosing not to coerce private agents—hence the contemporary dominance of derisking policies that are the focus of much of this special issue.⁹ Consequently, while the arguments I present here about coercion and state power are not limited to finance, finance, and in particular finance in the context of the green transformation, offers a particularly interesting case study.

This paper deliberately explores the space where IPE and political theory run headlong into one another. It asks, how does the design and implementation of macroeconomic policy impact the sustainability of democracy over time? More specifically, what is the differential impact on the sustainability of democracy of a state pursuing the green transition through subsidies, credit guiding regulations, state built green infrastructure, or a reliance on corporate PPAs? The answer, I suggest, lies in the observation that these policy designs are differentially coercive.

Coercion is a familiar concept in the international political economy (IPE) literature, especially when it comes to coercive relationships between states.¹⁰ Jonathan Kirshner's book *Currency and Coercion* details how big states can bully small states using what is now commonly referred to as monetary sovereignty.¹¹ Then there is the vast literature on interpersonal coercion, for instance Zimmerman on coercive wage offers.¹² What is less explored in the IPE literature is an idea that is

⁸ And the powers of private interests to grow.

⁹ This simple observation of a dominance of non-coercive policies when it comes to private finance is, of course, related to the dominant theoretical views that states should not 'pick winners' and markets are most efficient and effective when it comes to resource distribution.

¹⁰ In the 2021 Oxford Handbook on IPE there is a chapter on economic coercion which defines it as "a threatened or actual imposition of economic costs on one state by another with the objective of extracting a policy concession." McLean, "Economic Coercion." See also Grabel, "Coercing Credibility: Neoliberal Policies and Monetary Institutions in Developing and Transitional Economies."

¹¹ Kirshner, *Currency and Coercion*. For more on monetary sovereignty see Pistor, "From Territorial to Monetary Sovereignty"; Murau and Klooster, "Rethinking Monetary Sovereignty."

¹² Zimmerman, "Coercive Wage Offers."

generally accepted in political theory: coercion is justified and necessary, even constitutive, of a well-functioning state.¹³

While I draw on the concept of coercion throughout this paper, primarily in its political theoretic context in which it is understood as the basis of state power, it is worth noting explicitly that in most contexts, coercion has a negative connotation. We see coercion as the act of forcing another to do what they would not have otherwise done. Coercion, for most of us, most of the time, looks like a clear violation of liberty. Consequently, it hardly seems practical, let alone correct, to actively *promote* state coercion. This, I take it, is the intuition private financial agents are relying on when they decry states engaging in financial repression and it is in this light that I would understand if governments who did embrace the suggestions of the paper were not quick to describe them publicly as coercive. Nevertheless, it seems important to me, from the perspectives of both democratic theory and public policy that we recognize how foundational coercive power, and thus coercive policy, is to sustaining a well-ordered democratic state. While it might seem like coercive policies are a violation of individuals' liberty, it is essential to remember that in a democratic state, those same policies are also the expression of the citizenry's collective freedom.¹⁴

Taking this as my starting point, in what follows I argue first, that coercion is foundational to a well-functioning democratic state and second, that it is consequently dangerous for a state to get into a pattern of non-coercive policymaking that fails to sustain the coercive power of the state over time. The upshot is that, beyond considerations of effectiveness and efficiency, states have *democratic reasons* for coercing private financial firms into supporting the green transition.

Section one of the paper starts with the observation that states require coercive power. I then build on this observation to suggest that a well-ordered democratic state must deploy coercive policy.

¹³ There is a debate in the philosophical literature about whether coercion must be understood as a moral concept or if it can be described positively. Blake, "Distributive Justice, State Coercion, and Autonomy." For those who do think coercion is best understood as a moral concept, a problem arises if we think that states are foundationally coercive. There is variety of ways scholars square this circle. Some suggest that coercion is morally unacceptable, and states necessarily coerce, so we should reject states. Others argue that the state doesn't actually coerce. Others argue that coercion is best understood as a morally neutral concept. Consequently, if a state's coercive actions are justified or not depends on secondary theories of what sort of coercive action states can legitimately engage in.

¹⁴ For more on this idea see Lovett and Zuehl, "The Possibility of Democratic Autonomy." It is perhaps also worth noting here that from a particular perspective in political theory direct state action could be classed as both coercive, in the sense of dominating, and not coercive, in that same sense, depending on one's perspective. It is coercive vis-à-vis individual (i.e. private financial agents) but not so vis-à-vis citizens in a democratic state. The distinction here rests on political theoretic arguments about domination and collective power in a democratic or republican context. I don't go into the detail on this topic in this paper as it applies to the more colloquial understanding of the term coercive, which has more in common with the technical conception of domination than not the idea of coercion that I adopt here.

To make this argument I utilize Scott Anderson’s definition of coercion. This section concludes with a short discussion of Brett Christopher’s recent book, arguing that policies aimed at de-risking decarbonization are non-coercive and as such fail to contribute to sustaining the coercive power foundational to a well-ordered democratic state. The second section looks more closely at what coercing finance to fund the green transformation would look like. In this section I explore environmental developmentalism, industrial policy, and credit policies before considering challenges states might face in adopting coercive policies of this sort. The final section summarizes and concludes.

Democratic States & Coercion: The Importance of the Baseline

Max Weber famously defined the state by appeal to its monopoly over the legitimate use of force. He distinguished between authority based on coercion and authority based on a constellation of interests, defining law as an “order whose validity is externally underwritten by the *Chance* that physical or mental coercion will be applied by a specialized staff of people whose task is to enforce conformity or punish contravention.”¹⁵ In a much more recent book, political philosopher Philip Pettit outlines the function of the modern state as establishing a coercive territorial regime of law that orders the lives of its citizenry.¹⁶ John Rawls wrote, “a legal system is a coercive order of public rules addressed to rational persons for the purpose of regulating their conduct and providing the framework for social cooperation.”¹⁷

A well-ordered state, of any sort, requires some degree of coercion because states aim to coordinate resources, and coercion is fundamental to this. If they could not coerce, states would be left trying to coordinate activity by appeal to interests. This is one crucial difference between private and public institutions. Private institutions, firms, generally cannot coerce. Consequently, they must appeal to the interests of individuals to encourage them to act as desired. In fact, when private firms *are* able to coerce individuals, whether through their power as employers, or through market power, we tend to think of their coercive actions as illegitimate.¹⁸

As Theodore Lowi put it in the epigraph to this paper, “the most significant fact about government is that government coerces.”¹⁹ That being the case, we can say that the most significant

¹⁵ Weber, *Economy and Society*. I, 112.

¹⁶ See chapter 1 in Pettit, *The State*.

¹⁷ Rawls, *A Theory of Justice*, 235.

¹⁸ For examples see Anderson, *Private Government*. Thanks to Stefan Eich for pointing out this useful contrast.

¹⁹ Lowi, “Four Systems of Policy, Politics, and Choice,” 299.

fact about *democratic* government is that citizens collectively wield the state's powers of coercion.²⁰ The state, as Steven Klein writes, is the "infrastructure of power through which the people can act."²¹ Under a democratic system of government, citizens guide the state collectively and are coerced by state power individually, with the latter being a condition of the former.²² While a *democratic* state may require that the state's coercive powers be wielded in a particular way, it is nevertheless still the case that a democratic state requires the sustained power to coerce its citizens. Consequently, to sustain a healthy democratic state throughout the green transformation will require, among other things, the maintenance of that state's coercive powers.²³

Democratic states deploy their coercive force through the design, implementation, and enforcement of public policy. When the state makes and enforces coercive public policy it does two things. First, it forces citizens to act in ways they may not have otherwise done. Second, it sustains and bolsters the power of the state over its citizens. Different scholars see each of these as paradigmatic of coercion. Robert Nozick transformed the literature on coercion with an essay he wrote in 1969.²⁴ Central to Nozick's conception of coercion is the distinction between offers and threats.²⁵ For him, broadly, threats are coercive and offers are not. The distinction between the two rests on the concept of a baseline.²⁶ A threat changes the baseline state of affairs that the coercee faces, whereas an offer does not.²⁷ If I hold a gun to your head and say, 'your shoes or I'll shoot you', I have changed

²⁰ Many political theorists have offered conditions and mechanisms for how the people can properly wield this power. Rousseau, for instance, requires that the relevant laws are both general in origin and general in scope.

²¹ Klein, "Democracy Requires Organized Collective Power*." For more on the concept of the infrastructural power of the state, see Mann, "The Autonomous Power of the State."

²² Much of contemporary democratic theory is dedicated to outlining the proper limits of state power. What I am simply recognizing here is that nearly all those same theories start by recognizing the necessity of coercive state power to a democratic system of government. Perhaps somewhat contentiously I paint the coercive power of the state here not as a necessary evil but as a constitutive element of a healthy democracy that should be supported and actively attended to.

²³ One challenge to this view would be to suggest that we could maintain democracy without the coercive powers of the state by embracing some form of global democracy. Given the scale of the challenge of the green transformation I take the possibility of embracing a global democracy alongside securing a green transformation to be remote at the very best. Furthermore, it is not clear to me that *global* democracy would be preferable to a collection of state democracies. For more on the possibility and an argument for the desirability of global democracy see Koenig-Archibugi, *The Universal Republic: A Realistic Utopia?*

²⁴ Nozick, "Coercion." There is much debate on the literature about what coercion is *exactly* and how it relates to state power, and in particular if state coercion can be just. There is further debate on whether the use of force should be considered coercive. Scott Anderson offers a view contrary to Nozick's view, which argues that the use of force can be used to coerce as coercion is best understood by appeal to a differential in power, discussed below. See Anderson, "The Enforcement Approach to Coercion."

²⁵ And warnings, which are not discussed here but addressed in detail in Nozick's piece as the *way* in which the baseline is changed, i.e. if the recipient of the threat/offer would be willing to accept the proposed change or not.

²⁶ I use the term baseline to incorporate what Nozick discusses as the 'expected' course of events, which he intends to "straddle *predicted* and *morally required*." Nozick, "Coercion," 447.

²⁷ Note that for Nozick this is true even if the threat is not a real one. If I believe you will shoot me, then the threat is credible, even if there are no bullets in the gun, for instance.

the baseline. Prior to my utterance, your baseline state of affairs included possessing your shoes and did not include being shot. After my utterance, that changes. The expectation is that you will be shot unless you act in accordance with my wishes. By contrast, suppose I say, if you give me your shoes now, I'll buy you two new pairs tomorrow. Your baseline state of affairs—being alive and having your shoes—hasn't changed. In sum, Nozick's view of coercion centers on idea that to coerce is to force someone else act as they otherwise would not have done.

Scott Anderson describes coercion in a different way. For him, the key element of coercion is not the threat or the shifting baseline, but rather, the coercer's accumulation of power.²⁸ For Anderson, coercion is "any kind of activity by a powerful agent who creates and then utilizes a significant disparity in power over another in order to constrain or alter the latter's possibilities for action."²⁹ In contrast to Nozick, coercion on this view is not merely about pressuring someone into making a particular decision. Rather, for Anderson, the essential core of coercion is the power differential that enables an agent to exert such pressure successfully. Consequently, if as I observed above, a well-ordered democratic state requires coercive power, then on Anderson's view, establishing and sustaining just such a state requires coercive policy.

Coercive Policy

A state that progressively taxes wealth not invested in assets compatible with the green transformation is engaging in coercive policy on both Anderson and Nozick's view. According to Nozick, it is coercive because it eliminates the status quo as an option. Wealthy individuals can no longer invest in the same way without being subject to penalizing taxes. According to Anderson, it is coercive because the state "intentionally accumulates the power needed to constrain others broadly (say, by arming herself), and then employs or threatens to employ such powers in this way."³⁰

On Anderson's view, coercive policies would be those through which the state accumulates and exercises the power to "constrain or alter" citizens' "possibilities for action."³¹ Nudge policies, by contrast, are those that suggest to citizens that they should do something differently, or perhaps they

²⁸ Anderson frames his view, the 'enforcement' view in contrast to dominant, 'pressure' view which he associates with Nozick. The two views act like different lenses or emphases. As Anderson puts it in his own words, "While the enforcement approach does not regard threatening as necessary or sufficient for coercing, it is concerned with uses of the kind of power that underlies the ability to make significant, credible threats--namely, the ability to broadly inhibit another agent's actions." See footnote 14 in Anderson, "The Enforcement Approach to Coercion," 5.

²⁹ Anderson, 1.

³⁰ Anderson, 12.

³¹ Anderson, 1.

make the desired action easier or more convenient to achieve.³² Climate disclosure policies are a great example. They aim to make green investment more likely by giving private investors more relevant information, however, in so doing they do not substantially bolster the power of the state over investors.

Policies that work through attraction are similar to nudge policies in shape but stronger in pull. They influence individual behavior by making particular actions more attractive. A clear example of attraction policies are subsidies. When states deploy subsidies to make the production and purchase of electric vehicles more attractive, they are deploying attraction policies. When states deploy fixed input tariffs with the intention of making renewable energy projects bankable, they are deploying attraction policies.³³

On Anderson's view, attraction policies are clearly noncoercive.³⁴ Suppose a state wants to increase investment in battery technology. It has two options: offer private investors inducements to make the relevant investments more desirable or require them to make the relevant investments.³⁵ Both options work by altering the option set the private investors face, the former by making the desired option more attractive, the latter by requiring particular action and thereby eliminating the status quo as an option.³⁶ What makes one approach coercive and the other not, on Anderson's view, is the difference in the power dynamic each policy approach produces. In the former case the private investors get the upper hand. Subsidies influence agents' actions by appealing to their existing interests. By contrast, in the latter case, the state intentionally deploys its power to constrain the actions of private investors.³⁷

³² Nudge policies are like a form of voluntary regulation. The state thinks it would be a good idea for you to buy more fruit, so it makes it easier for you to buy fruit.

³³ Fixed input tariffs come in a variety of forms, but most generally they work by offering fixed prices per MWh produced to renewable energy producers, usually for some fixed period of time.

³⁴ While the distinctiveness of coercive policy might seem analytically clear, it is much murkier in practice. Consider, how should we categorize a tax on carbon emissions? One might argue that it simply discourages carbon emissions or encourages the use of green energy and thus is an attraction-based policy. However, on another view (the one I favor here) those subject to the tax are *coerced* into paying it, the baseline option of emitting carbon and not paying the tax is no longer available.

³⁵ Some call these two approaches sticks and carrots. But the label doesn't seem quite right to me. The state is not punishing, i.e. beating the donkey with a stick, if it changes the baseline by requiring particular investments. Rather, it is doing what all states do, using coercive policy to determine the rules of the game when it comes to all sorts of activities in society, including investment. Eich (this issue) has a good discussion of this. In his words, the state is not merely using a stick (or a carrot) to achieve given ends, it's worldmaking. For another example of this framing see Kedward, Gabor, and Ryan-Collins, "Carrots with(out) Sticks."

³⁶ In other words, changing the baseline.

³⁷ Some have argued that the coercive power of the state is reputation based. This has two interesting implications. First, that the state need not exercise its power to ensure compliance. This is clearly true. Most people obey the law without it having to be enforced. Second, and less obvious, is that one builds reputational power by exercising it. In other words, when the state does clearly and publicly deploy its coercive power, it simultaneously sustains it. This view of state power

Anderson's view, in focusing on the power dynamic between the would-be coercer and coeree, enables us to capture more complicated policy arrangements as well. Contrary to Nozick's sharp distinction between offers and threats, philosophers now recognize the possibility that some offers can be coercive. They call these throffers (threat + offer). Suppose, for instance, that the state offers utility companies subsidies to support their transition to renewable energies but further stipulates that regardless of whether the company accepts the offer, regulations will soon require that companies make the transition. It is like me saying, 'sell me your shoes at top price, or I'll shoot you'. The U.S. approach to electric vehicles is a compelling example. The government has announced a wide variety of policies in the form of offers to incentivize companies to make electric vehicles and consumers to buy them, including production credits, manufacturing conversion grants, loans to domestic manufacturers, tax credits for purchases, and more. These policies are meant to encourage the desired outcome—a transition to electric vehicles. These offers have now been followed up with a regulatory proposal that would require car companies to meet much higher efficiency standards, in effect requiring that they produce electric vehicles. Taken as a policy package, this looks very much like a throffer.³⁸ Furthermore, even if it makes the transition easier through the use of subsidies, such a policy package does ultimately exercise and bolster the power of the state to limit the choice set of private financial agents. As such, on Anderson's view, it is coercive.

Should states decide to embrace the use of coercive policies in funding a green transition, it is likely that those coercive policies will take the form of throffers—a sweetened form of coercion. As I argue in the next section, derisking is a non-coercive approach to guiding finance. Over time, the state's reliance on this approach has eroded the state's power and bolstered that of private finance. As such, any attempt to embrace coercive policy today will need to be sweetened, as state's will be attempting to coerce very powerful private agents without much capacity of their own.³⁹

De-risking as non-coercive

seems very much in line with the Anderson's conception of coercion I have deployed here Anderson, "The Enforcement Approach to Coercion," 13. For an account of the state as organized crime that is not so positive and is focused more on the formation of states than the exercise of democratic power see Tilly, "War Making and State Making as Organized Crime." For more on the related concept of credibility see Grabel, "The Political Economy of 'Policy Credibility'"; Grabel, "Coercing Credibility: Neoliberal Policies and Monetary Institutions in Developing and Transitional Economies."

³⁸ For more on throffers see Stevens, "Coercive Offers"; Steiner, "Individual Liberty." It is also an interesting example of what Eich (this issue) calls for when he argues that the "use of carrots should at the very least be accompanied by the threat of sticks in order to alter expectations."

³⁹ I return to this point later on in discussing challenges. Blyth & Driscoll also discusses this in detail.

Policies that aim to attract or bribe private finance into supporting green (or otherwise state desired) investments are what many in the literature, including this special issue, call ‘de-risking’ policies.⁴⁰ Far from the state coercing private finance, if anything, derisking decarbonization looks more like private financial agents coercing the state. Their aims are very clear—investments that will generate relatively risk-free returns—and their threat is credible—to take their money elsewhere.⁴¹ If states rely on derisking policies, private financial agents are empowered to determine the terms of conditions of the transition. This can produce a ratchet effect, or a hostage situation, in which the only way that the state can achieve its desired aim is by meeting the increasing demands of private financial agents.

In his recent book, *The Price is Wrong*, Brett Christophers describes just such a process when it comes to state subsidies on renewable electricity generation.⁴² In an effort to get the private sector to invest in and produce green energy states aim to make related investments attractive either through subsidies, implicit or explicit, or guarantees like those secured through a fixed input tariff.⁴³ Christophers observes that once such a system is in place it is nearly impossible to remove without causing a collapse in renewable energy generation as it is the state subsidy or guarantee that makes the projects bankable in the first place, and the underlying economics of electricity generation make this unlikely to change.⁴⁴

Most important for our purposes is the observation that this arrangement puts the private financial agents in the driver’s seat when it comes to achieving the public aim of the green transition.⁴⁵ Through these derisking arrangements, private financial agents accumulate power over states, rather than the other way around. They are empowered to say, if you take away our subsidies, we’ll stop producing renewable energy, or in some cases, if you don’t increase your support, we’ll stop.

⁴⁰ Gabor & Braun (this issue); Gabor, “Critical Macro-Finance”; Gabor, “The Wall Street Consensus”; Kedward, Gabor, and Ryan-Collins, “Aligning Finance with the Green Transition: From a Risk-Based to an Allocative Green Credit Policy Regime”; Christophers, *The Price Is Wrong*; Christophers; Kedward, Gabor, and Ryan-Collins, “Carrots with(out) Sticks.”

⁴¹ One would need more to argue that it *is*, in fact, coercive on Nozick’s account as possessing a clear aim and a credible threat are necessary but not sufficient conditions. Nevertheless, this is suggestive as we can say on this basis that derisking *is more* like private finance coercing state than state coercing private finance.

⁴² Christophers, *The Price Is Wrong*. Some have also pointed out cases in which banks take the incentive/subsidy and yet don’t engage in the desired activity. See Van Lerven and Ryan-Collins, “Adjusting Banks’ Capital Requirement in Line with Sustainable Finance Objectives.”

⁴³ For a detailed discussion of other tax credits and subsidies used in the U.S. case see MacNeil, *Neoliberalism and Climate Policy in the United States*, 75–78.

⁴⁴ Christophers, *The Price is Wrong*, 297.

⁴⁵ This is perhaps even more true when states attempt to remove public support and rely instead on corporate PPAs. Christophers describes states as dependent on, “a small coterie of big-tech companies, and their idiosyncratic energy-purchasing habits, to drive the transition away from fossil fuels.” Christophers, *The Price Is Wrong*, 257.

In Vietnam, for instance, the year after the state support in the form of feed in tariffs ended “solar installations collapsed—literally, to zero.”⁴⁶ Developers have argued that private “power-purchase-agreement terms are ‘unbankable’ without curtailment guarantees” from state owned enterprise and state guarantees on those payments. In other words, if the state does not intervene to make these investments more appealing, the money will not be forthcoming. Christophers argues that this is clear evidence of the fact that the fundamentals of this market require ongoing support. I simply observe that it is also evidence of the power private financial agents hold over the state when it comes to securing the investments integral to decarbonization, and that this power is, in part, a product of the state’s use of attraction-policies.

One could challenge this claim by observing that even in such a situation, the state retains the formal power to act however it pleases. In other words, in what way exactly does a pattern of derisking erode the power of the state to coerce over time? Why would deploying a pattern of non-coercive policy over time, make it harder for the state to coerce in the future? The answer is partly informal, in that over time, when a state doesn’t coerce private finance, state actors—policymakers, legislators, and even citizens—begin to believe that they cannot, or that it is too difficult or too expensive to do so. Their imagination about what is possible through policy, and their expectations about what will or will not happen adapt to the given policy pattern.⁴⁷

A pattern of derisking will also, over time, influence the formal power relationship between private finance and the state. Derisking works by making investments more appealing to private financial agents. A pattern of derisking policy consequently results in private financial agents profiting as well as engaging in more of the desired set of investments, be those green energy companies, relevant infrastructure, or basic technology companies. The consequence is that the relevant private financial agents, through a pattern of derisking policies, grow their wealth and gain in experience, knowledge, and ownership of the physical infrastructure and core technologies central to the green transition. Over time, then, the opportunity cost of those financial agents disengaging or leaving becomes higher and higher. They gain power over the state.

Some scholars argue that an approach to securing the green transition that relies on de-risking policies which aim to attract or bribe private finance will simply not be effective.⁴⁸ Others have observed that relying on the private sector in this way means that the state does not develop the

⁴⁶ Christophers, 296. For more details of the Vietnam case see Lund Larsen, this issue.

⁴⁷ For more on the distinction between formal and effective power in the context of public policy see Downey, “Delegation in Democracy: A Temporal Analysis.”

⁴⁸ Christophers, *The Price Is Wrong*.

requisite capacity in the form of expertise, personnel, and infrastructure.⁴⁹ I have argued here that securing the green transition through de-risking alone erodes state power because it is fundamentally non-coercive. Rather than the state designing, implementing and enforcing policy such that power accumulates in the state to force citizens, most especially private financial agents, to act in particular ways, it does the opposite, allowing private financial agents to accumulate power they can use to steer public policy.

Coercing Decarbonization

Perhaps the most well-known example of states deploying coercive policies to shape the macroeconomic environment is what is commonly referred to as the developmental state.⁵⁰ As Kim and Thurbon describe it, “developmentalism embodies an inherently political view of the economy; in the eyes of policymakers, the purpose of economic activity is to promote national security and prestige in what is perceived to be an inherently competitive and hostile international arena. The goal of industrial governance is therefore to promote local manufacturing capacity, technological autonomy and export competitiveness for nation-building and nation-sustaining purposes. For this reason, amongst the policymaking elite, the practice of strategically intervening in the economy in pursuit of these goals is accepted as both necessary and desirable.”⁵¹

The powers of developmentalism have recently been tuned to address the climate crisis more directly. Robert MacNeil has argued that this shift is not necessarily straightforward as the developmental state model is better suited to facilitating a shift toward particular sectors, rather than away from others. As he put it, in the case of the green transition “the state is required to purposefully undermine and destroy conventional energy.”⁵² While this has required a shift in the structures of many developmental states, MacNeil argues that it has proven especially hard in the context of ‘hidden’ developmental states like that found in the U.S.

By contrast, Thurbon et al. document in great detail a system that they refer to as environmental developmentalism in which states in East Asia deploy state power to support green

⁴⁹ Blyth and Driscoll, this issue.

⁵⁰ Most classically, Johnson, *MITI and the Japanese Miracle*; See also Thurbon, “The Resurgence of the Developmental State.”

⁵¹ Kim and Thurbon, “Developmental Environmentalism.”

⁵² MacNeil, *Neoliberalism and Climate Policy in the United States*, 51.

investment and to reduce investment in dirty and polluting sectors.⁵³ The creative destruction approach that they outline is a mixed approach to state intervention that entails offers, threats, and throtters. In the case of Korea, the environmental developmentalism approach entailed direct public investments, approximately 2% of GDP between 2009 and 2013, alongside coercive regulations.⁵⁴ For instance, in 2012, the government mandated that the state's largest utility companies generate 4% of their energy from renewables by 2015 and 10% by 2022.⁵⁵

Essential to the Korean case, according to Kim and Thurbon, was the presence of a pre-existing developmental state approach to economic policy. Key to the emergence of Developmental Environmentalism were long standing institutions aimed at "strategically intervening in the economy in pursuit of" goals such as "national security and prestige."⁵⁶ Previously, the Korean developmental state had achieved economic success through the use of a developmental state model which deployed a range of coercive policies and relied heavily on fossil fuels. "Between 1990 and 2007, Korea's carbon emissions grew the fastest in the Organization for Economic Cooperation and Development (OECD), making it the world's ninth largest CO₂ emitter."⁵⁷

Kim and Thurbon argue that the shift in Korea from Developmentalism to Developmental Environmentalism was a change in the perspective of policy elites as to what served their developmental aims. In other words, in the Korean case, the coercive tools and the state's willingness to use them had long been present. What changed was the state's aim, with the emergence of green growth as a motivating target.

While developmentalism, and now environmental developmentalism, is generally associated with East Asian states, western nations are increasingly embracing what Aiginger & Rodrik and Chang & Adreoni have separately referred to as 'Industrial Policy in the twenty-first century.'⁵⁸ Aiginger &

⁵³ For more on the destructive piece of the picture see chapter four in Thurbon et al., *Developmental Environmentalism*. The authors develop a concept of state policy aimed at creative destruction that seems compatible with the idea of the throtter policy package outlined earlier.

⁵⁴ Kim and Thurbon, "Developmental Environmentalism." See also Thurbon et al., *Developmental Environmentalism*.

⁵⁵ This led to increasing renewable investment from US\$616 million in 2007 to US\$4.03 billion in 2011. Kim and Thurbon, "Developmental Environmentalism." This strategy of mandating that utilities generate a particular amount of energy from renewables (sometimes called Renewable Portfolio Standards) has been used elsewhere as well, including by U.S. state governments, for more on this see MacNeil, *Neoliberalism and Climate Policy in the United States*, 80.

⁵⁶ Kim and Thurbon, "Developmental Environmentalism."

⁵⁷ Kim and Thurbon.

⁵⁸ Aiginger and Rodrik, "Rebirth of Industrial Policy and an Agenda for the Twenty-First Century"; Chang and Andreoni, "Industrial Policy in the 21st Century." For a discussion of industrial policy along these lines as recently introduced in the EU, and in particular its relationship to 'polity building' see McNamara, "Transforming Europe?" See also Mazzucato and Rodrik, "Industrial Policy with Conditionality." See also Mazzucato and Rodrik. Mazzucato, Kattel, and Ryan-Collins, "Challenge-Driven Innovation Policy."

Rodrik write, “Summarizing, industrial policy is a systemic approach that coordinates [sic] innovation, regional policy, and trade policy...It should be steered by societal goals...Extending far beyond the correction of market failures, it is a search process in the unknown that not only profits from a dialog with experts, interest groups, and citizens but must also avoid hijacking by special interest groups and populism.”⁵⁹ The first thing to note is that this sort of industrial policy moves beyond fixing market failures, and instead, seeks clearly articulated substantive policy aims.⁶⁰ Kathleen McNamara describes this in the contemporary European context as “visibly interventionist European industrial policy and geopolitical market strategy” that explicitly picks winners and losers.⁶¹ Mazzucato and Rodrik have developed a taxonomy of industrial policies that include what they call ‘conditionalities.’⁶² In this way, many of the industrial policies we see emerging today contrast with what scholars have previously referred to as the hidden developmental state, an approach to macroeconomic which dominated U.S. policy since 1980s. Under the hidden developmental state, policy was intentionally non-coercive.⁶³

States are increasingly embracing an approach to economic policy—industrial policy or developmental environmentalism—that embraces state intervention, direction, and direct action.⁶⁴ As part of this shift, there are plenty of climate related policies that are coercive: requirements for companies to reduce emissions, carbon taxes, bans on fossil fuel-based cars, and so on. What is less common, and what I have advocated for in this paper, is state coercion of private finance in pursuit of the green transition.

Credit Policy

Brett Christophers has argued that critiques of de-risking are “not particularly helpful.” “Unless the state,” he writes, “were willing and able widely to compel private sector actors to invest in the development of such [renewable energy] infrastructure against their own volition, it is hard to see what

⁵⁹ Aiginger and Rodrik, “Rebirth of Industrial Policy and an Agenda for the Twenty-First Century.”

⁶⁰ The authors argue that this public articulation of aims enables better policy coordination making policies more effective and enables an essential process of learning. On the second, see also Kessler and Sabel, “The Uncertain Future of Administrative Law”; Sabel and Victor, *Fixing the Climate*; Sabel and Zeitlin, “Experimentalism in the EU.”

⁶¹ McNamara, “Transforming Europe?”

⁶² Mazzucato and Rodrik, “Industrial Policy with Conditionalities.”

⁶³ Block, Keller, and Negoita, “Revisiting the Hidden Developmental State”; Block, “Swimming Against the Current”; Popp Berman, *Thinking like an Economist*. For more on the U.S. case and “hidden” developmental climate policies see MacNeil, *Neoliberalism and Climate Policy in the United States*. especially chapter 6

⁶⁴ Some scholars have dubbed this constellation of emerging coercive macrofinancial policy ‘New State Capitalism’. They include in this development banks, public ownership of companies and credit guidance and controls. Petry, Koddenbrock, and Nölke, “State Capitalism and Capital Markets”; Schindler, Alami, and Jepson, “Goodbye Washington Confusion, Hello Wall Street Consensus.” Alami and Dixon, *The Spectre of State Capitalism*.

good would come of a refusal to de-risk.”⁶⁵ Christophers is arguing here from the perspective of efficacy. In other words, de-risking is likely an essential policy tool if we are to achieve the green transition at all. What I have argued in this paper is that, while Christophers may be right about this, it is also true that for such a transition to be *democratic* it will require that the state does not only attract and nudge, but also coerces private finance. One obvious opportunity for doing just that is through credit policy.

At the tail end of the first Trump Presidency, the Office for the Comptroller of the Currency—one of the primary bank regulators in the U.S.—proposed a regulatory rule which aimed to prevent banks from lending based on criteria other than pre-determined quantitative profit calculations. In other words, it would prohibit banks making credit allocation decisions based on things like Environmental, Social, and Governance (ESG) standards. Implicit in this rule is the idea that the state, in the form of the OCC in this instance, should decide what are the reasonable bases for credit allocation. Under Trump, the OCC suggested that the only reasonable basis was quantitative profit calculations.⁶⁶ It is entirely reasonable to suppose, however, that the state might decide that securing the green transformation is a policy priority. Credit guidance is one form of coercive policy that could help achieve that. Instead of requiring that banks, and other credit providers, make investment decisions based on pre-determined profit calculations, they might require a particular investment pattern more in line with decarbonization. This is not a new idea.

Historically, credit policy was seen as the third leg of macroeconomic policy, alongside monetary and fiscal policy.⁶⁷ The aim of credit policy was to steer investment—public and private—through the state provision of credit, but also through the regulation of private investment. There are at least two ways in which modern states could deploy coercive credit policy in pursuit of the green transition. The first is for the state to require private financial agents to make the desired investments. The second is for the state to make the investments itself. Both are coercive in the sense that both clearly exert and bolster the power of the state to alter and limit the choice set citizens face.⁶⁸

⁶⁵ Christophers, *The Price Is Wrong*, 351. He also suggests that an alternative is the state taking on itself the job of developing, financing, owning and operating renewable energy infrastructures.

⁶⁶ “OCC Finalizes Rule Requiring Large Banks to Provide Fair Access to Bank Services, Capital, and Credit.” Note this is an example of what MacNeil describes as state’s rulemaking power which has long played a significant role in influencing climate policy in the U.S. MacNeil, *Neoliberalism and Climate Policy in the United States*, 87–89.; see also Schoenbrod, “How REINS Would Improve Environmental Protection.”

⁶⁷ For a discussion of the limits and definitions of credit policy see Monnet, *Controlling Credit*; Monnet, “The Democratic Challenge of Central Bank Credit Policies.” For a policy document that outlines credit policy as a core leg of macroeconomics see Douglas et al., “Monetary, Credit, and Fiscal Policies.”

⁶⁸ Notably some central banks have required private banks to lend to green activities at different rates. Usually these policies are what I would describe as non-coercive, but more like nudging, offering better rates for green activities. For

States could require private financial agents to make the desired investments in a few ways.⁶⁹ The first is to change the requirements financial agents face when interacting with the state. The most obvious example of this is collateral requirements. When private financial agents come to the state for liquidity support, they have to post collateral. Collateral requirements could be made to incorporate green assets. Second, some states require banks to lend a certain percentage of their assets to priority sectors, including renewable energy. The Reserve Bank of India, for instance, requires that 40% of all bank loans go to priority sectors, which now include renewable energies.⁷⁰ Other states mandate interest rate discounts for priority sectors. Such policies clearly bolster the power of the state over private financial agents by forcing them to comply with green investment requirements. Third, states could regulate against investment in particular assets in the form of lending limits or exclusions.⁷¹

States could also make the desired investments themselves.⁷² This is perhaps the most familiar form of coercive credit policy but that which we are least likely to intuitively categorize as coercive. It includes direct state investment in relevant research and development, state engagement in infrastructure and production, as well as the use of state investment banks and other SOEs to do the same. Examples of this approach are endless. They include everything from the Korean state directly investing in green research and development to green investments made by state investment banks.⁷³ Such state action might not, at first, seem coercive, as it does not have the intuitive feel of forcing someone to act in a particular way. After all, the state is engaging in the investment itself, in what way is it coercing others?

To see why direct state investment is coercive in the relevant sense we must go back to the definition of coercion. Both dominant definitions of coercion—Nozick’s and Anderson’s—are situated in time. For Nozick this is most obvious as his definition requires identification of a baseline

example see van ‘t Klooster and van Tilburg, “Targeting a sustainable recovery with Green TLTROs.” The Bank of Japan has a history of similar practices. In the case of China, it seems such programs have been more coercive, or at least involve “benevolent compulsion.” Geiger, “Instruments of Monetary Policy in China and Their Effectiveness”; Dikau and Volz, “Out of the Window?”

⁶⁹ Some scholars have promoted an embrace of promotional monetary policy in service of the green transformation, Campiglio, “Beyond Carbon Pricing.” More broadly, one could imagine a more complete credit policy scheme aimed at decarbonization, whether using differential reserve requirements, collateral policy, capital requirements, differential credit ceilings or quotas, or even a publicly actioned asset purchasing scheme.

⁷⁰ Creehan, “Priority Sector Lending in Asia.”

⁷¹ For more examples of credit policies aimed at decarbonization see Kedward, Gabor, and Ryan-Collins, “Carrots with(out) Sticks.”

⁷² As Christophers puts it, the state “doing rather than ordering” Christophers, *The Price Is Wrong*, 371.

⁷³ Mazzucato, *Mission Economy*; Macfarlane and Mazzucato, “State Investment Banks and Patient Finance”; Kedward, Gabor, and Ryan-Collins, “Aligning Finance with the Green Transition: From a Risk-Based to an Allocative Green Credit Policy Regime”; Aiginger and Rodrik, “Rebirth of Industrial Policy and an Agenda for the Twenty-First Century”; MacNeil, *Neoliberalism and Climate Policy in the United States*.

that is in place *before* the coercive action occurs. For Anderson the same is true in the form of what we might call a baseline balance of power. An action is coercive, relative to this baseline, if it creates and utilizes a disparity in power in order to change the coercee's possibilities for action. In other words, through coercing, it bolsters the coercer's balance of power over the coercee. If the baseline state of affairs is a state without income tax, then imposing income tax is, by this view, coercive.⁷⁴ This seems counterintuitive to most readers because the baseline is so distant, but it is consistent with the definition. What I have suggested here, is that against a baseline of non-coercive derisking policies, engaging in direct state investment is coercive, because it tilts the balance of power between the state and private finance in favor of the state by exercising the state's power to change citizens' "possibilities for action."⁷⁵

All forms of credit policy require that the state take an explicit stance on what constitutes a priority asset—what it wants to see more investment in, and what less. In order to coerce private finance, the state must first articulate what it wants private financial agents to do. That means the development of a classification of assets, which would require political engagement and state capacity.⁷⁶ While definitely difficult, and a shift away from the norm of avoiding explicitly choosing winners and losers, this is far from impossible.

During World War I, the Fed established the Capital Issues Committee (CIC) to "prevent a diversion of capital into industries not essential to the war effort."⁷⁷ To that end, the committee examined all prospective stocks and bonds worth more than \$100,000 to determine which served "the national interest" and which did not. The CIC could not prevent private issuance of stocks and bonds, but its public disapproval did have serious negative impacts on marketability.

Eric Monnet has written extensively on the French use of credit policy in the post war period.⁷⁸ He has concluded that "the correlation between high growth and financial restraints in postwar Europe is a robust fact."⁷⁹ To this end, Monnet has subsequently proposed establishing an independent European credit council.⁸⁰ Monnet writes, "A European Credit Council at the European level would coordinate the various policy actions of the European Union to ensure the financing of

⁷⁴ Nozick famously argued as much in Nozick, *Anarchy, State, and Utopia*, 169-172.

⁷⁵ Anderson, 1.

⁷⁶ To meet democratic requirements political engagement should be democratic. Contrast with other approaches such as found in Mazzucato on common good, elsewhere her suggestion using UN development goals.

⁷⁷ Dill, "Selective Credit Controls: The Experience and Recent Interest."

⁷⁸ See also Kedward, Gabor, and Ryan-Collins, "Carrots with(out) Sticks."

⁷⁹ Monnet, *Controlling Credit*, 211.

⁸⁰ Monnet, "The Democratic Challenge of Central Bank Credit Policies"; Feldmann, "The Credit Council in the US Context."

its general objectives.”⁸¹ Monnet’s credit council would not follow the CIC in offering (or denying) state approval of particular assets. Much more modestly, the council would offer the European Parliament the expertise required to challenge, monitor, and sometimes compliment the credit policy implicitly conducted by the ECB.

The European Parliament itself has already established a taxonomy of sustainable assets. To be a sustainable asset, according to the EU’s taxonomy, assets must substantially contribute to at least one of a set of stated objectives and do no significant harm to any others. Furthermore, the EU has required that sustainable assets meet some set of minimum social standards, above and beyond the “green” objectives. While the taxonomy is not without its detractors, in a basic sense, the EU has outlined a mechanism for identifying preferred assets.⁸²

Non-coercive policies have long dominated macroeconomic policy.⁸³ This has led to the development of powerful private agents, a diminished state reputation, and eroded state capacity. Consequently, when governments are faced with the question, what sorts of policies should we deploy to finance the green transition, they are presented with this question in the context of depleted state capacity, a point that Blyth and Driscoll compellingly defend in this issue. That makes securing a democratic approach to the transition even more difficult. It requires both (1) deploying depleted state powers of coercion to coerce private finance, and (2) simultaneously building the state’s capacity to coerce.

The first is particularly difficult in the context of a globalized financial system. A weakened state that attempts to coerce private financial agents into complying with its stated political aims will clearly run the risk of them walking away. In other words, attempting to democratically steer investment could cause a state to lose investment. There are two responses to this challenge. The first is to observe that this is an equilibrium problem. Private investors may choose to leave a particular political jurisdiction in the face of coercive policies if there are other, more attractive political jurisdictions to which they can move. Consequently, when most states are relying on a pattern of non-coercive policy to finance the green transition, it is more difficult to deploy coercive policies. By contrast, as more states embrace the coercive approach, private investors have fewer regulatory havens to which they can flee.

⁸¹ Monnet, “The Democratic Challenge of Central Bank Credit Policies,” 21.

⁸² The most obvious and prevalent critique is that of green washing. For more on this see Kedward, Gabor, and Ryan-Collins, “Carrots with(out) Sticks.”

⁸³ Braun & Gabor, this issue; Kedward, Gabor, and Ryan-Collins.

The second is a policy response: capital controls. These are coercive policies that make it much more difficult for private finance to up sticks and leave if they don't like the policies in a given state. As Eric Helleiner pointed out in discussing the Bretton Woods period, capital controls have long been recognized as a coercive form of policy that bolsters state power, "The bankers were also concerned about the compatibility of capital controls with a liberal democratic form of government. Whereas Keynes and White had viewed controls on the investment behavior of a wealthy minority as essential for a government's political autonomy, their critics viewed such controls as overly 'coercive' and reminiscent of the 'Hitlerian monetary system'."⁸⁴ More recently, scholars have argued in favor of "imposing coercive limits on cross-border capital mobility" by appeal to global justice considerations.⁸⁵

Finally, it is worth observing that not all states are the same. Some states are particularly attractive places for private financial actors to reside and to invest. Those more desirable jurisdictions may find that they could more easily embrace coercive policies, as it would take more to cause private financial agents to leave. This is evidenced clearly by the concept of hot money as it relates to developing nations. Private finance is more readily prepared to pick up and leave developing countries. By contrast, it would take a lot for a big bank to decide to leave the U.S.

Combining these observations offers one conclusion. To create the conditions for securing a democratic green transition, we must see movement away from the existing macroeconomic policy equilibrium in which the non-coercive policy framework prevails. The only way out of that particular equilibrium is for those jurisdictions where private finance currently prefers to reside to act first.

Alternatively, one might conclude that relying on state governments to solve this problem independently, regardless of who moves first, is untenable and instead a systemic approach to this problem is required. Others in this special issue make exactly this argument.⁸⁶ The difficulty with such an approach is that it faces power imbalance issues: some states hold coercive power over others. The obstacle to such a systemic, non-statist approach to the problem it seems, is the simple observation that, as things currently stand, there is no presumption of political equality between states. Consequently, it is hard to imagine those states which hold coercive power over others embracing a systemic solution to the problem which does not itself bolster and sustain their own coercive powers.

Summary and Conclusion

⁸⁴ Helleiner, *States and the Reemergence of Global Finance*, 41.

⁸⁵ Cordelli and Levy, "The Ethics of Global Capital Mobility."

⁸⁶ Van 't Klooster and Prodani, this issue.

States are foundationally coercive entities. That is, in part, what makes them states. Their entire aim is to alter the choice set of citizens, to coordinate actions and resources. This is just as true of democratic states as it is of any others. In fact, the coercive power of the state is the mechanism through which citizens are able to engage in self-government. The coercive power of the state gives effect to the democratic will. Consequently, to secure a green transformation that doesn't erode democracy requires a policy approach that preserves the coercive power of the state.

Following Anderson, I adopted the view that coercive acts are those which intentionally accumulate "the power needed to constrain others broadly" and then employ or threaten "to employ such power in this way."⁸⁷ Utilizing this conception of coercion, I outlined coercive policies as those which bolster and exercise the power of the state to limit or shape citizens' decision sets. I contrasted coercive policies with nudge and attraction policies, the classic example of which is a subsidy. These sorts of non-coercive policies induce agents to act in the desired way by making it more appealing based on their existing preferences. Derisking, as a "form of conservative worldmaking by and for finance," fits this mold perfectly.⁸⁸

I then argued that the problem with a policy strategy that relies on derisking green investment is that it fails to coerce, and in so doing, fails to sustain the coercive power of the state over private financial agents. Consequently, to secure a green transformation that sustains democracy, the state must coerce private finance, even if it does so alongside de-risking offers, inducements, and guarantees.⁸⁹ In the second section of the paper, I outline in more detail some of the ways states might coerce private financial agents through the use of credit policy.

This paper brings together the concept of coercive state power from political theory with discussions of policy design and decarbonization in IPE using the simple observation that the form macroeconomic policy takes, over time, influences the sustainability and strength of democracy. In other words, the difference between the tax subsidies offered in the IRA to promote EV production and consumption, credit regulations that require banks and shadow banks to invest in priority sectors like battery development, and an implicit reliance on PPAs to make renewable investments bankable, bears not just on matters of efficacy and efficiency in securing a green transformation, but also on the sustainability of democracy over time.

⁸⁷ Anderson, "The Enforcement Approach to Coercion," 12.

⁸⁸ Eich, this issue.

⁸⁹ It is of course the balance of these two sorts of policies that will determine who comes out with the balance of power. We might tend to think that to maintain the coercive power of the state over private finance the state would need to deploy a portfolio of policies that even if it included some inducements was, on balance, coercive.

Others have pointed out that a derisking approach is unlikely to be a fast or effective way to decarbonize.⁹⁰ On one level this seems obvious. Why would we think that securing an energy revolution, which will require huge changes in physical infrastructure and in habits and patterns of human life, could be best achieved (or achieved at all) without changing, and in particular limiting, the choice sets citizens face? Beyond considerations of efficiency or effectiveness or speed, however, what I have emphasized here is that there are democratic stakes that should be considered in designing green financial policy. In short, states will need to engage in a coercive approach to credit guidance—explicitly articulating the state’s preferences for how credit should be allocated and forcing private financial agents to comply. It is in this way that states can build and exercise their coercive power over the creation and allocation of credit, and in so doing, sustain the coercive powers foundational to a well-ordered democracy.

This is by no means an easy task given many states’ lack of capacity after being hollowed out and adopting a non-coercive (or at best hidden) approach to credit policy for the better part of the last 40 years.⁹¹ It may be that the best policy option states have is the throffer articulated above, in Nahm and Kupzok argue in this issue, in practice today climate policies are passed and enacted largely by virtue of a ‘grand bargain’ between climate activists and those who are already powerful in the economy. Far from bolstering the power of the state over private finance, this would suggest that the most effective way to pass climate policy would be to pander to the powerful. Given the argument I’ve made here, this suggests that for many states, in facing the question of how to pay for the green transition, they also face a tradeoff between what is immediately effective politically and what is required to sustain or bolster the democracy. That is, unless they can change existing preferences, choice sets, and risk perceptions, or in other words, engage in a degree of worldmaking, “the comprehensive act of creating a particular future world through the definition of what is risky, for whom, and in what way.”⁹² That is a tall order indeed.

Nevertheless, it might be required. For, an approach to securing the green transition that eschews democracy, particularly in a state that self-describes as democratic, runs the risk of self-destructing. As the Trump administration’s OCC rule on ESG investment considerations, the yellow-vest protests in France, and a recent rebuke of the low emission zone around London in the UK demonstrate, without citizen buy-in, it can be very hard to pass policy aimed at decarbonization. And

⁹⁰ Christophers, *The Price Is Wrong*.

⁹¹ Blyth and Driscoll, this issue

⁹² Eich, this issue.

that's even before we consider what is required to coerce private financial agents in particular, some of the most powerful actors in the economy today. To do so will require all the coercive power that the state can muster, and in a democracy that power comes from the collective buy in of citizens.

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