Buy-in for Buyouts: Attitudes Toward Compensation for Reforms*

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October 25, 2023

Abstract

Political reforms are often stymied by concentrated interest groups who lobby to block change that would benefit the majority. One under-examined policy response is to compensate the recalcitrant group in exchange for agreeing to the reform. We refer to such mass compensation schemes as public buyouts. After laying out the theoretical case for and against buyouts, we design a series of survey experiments to gauge the determinants of public support for buyouts linked to two reforms—phasing out coal energy, and simplifying tax filing—both held up by vested interest groups. Partisanship appears systematically related to attitudes towards buyouts, as does program design: buyouts find significantly more favor when they target individual workers, rather than companies. Yet the chief objection to buyouts is normative: individuals' "moral aversion" to compensating actors who hold up beneficial reforms dominates other salient concerns, like moral hazard. Our results also highlight a vexing credibility problem: those who support reform also support reneging on the compensation once the reform is passed. Recipients may thus be right to fear policy reversals. Buyouts may be a democratically viable means of passing beneficial reforms that have been blocked for decades—yet their design proves decisive.

^{*}We thank Marco Mendoza Aviña, Marie Fester, Sean Nossek, and Jesse Shuster for assistance. We thank Cameron Ballard-Rosa, Devin Case-Ruchala, Tyler Ditmore, and seminar participants at the University of North Carolina and the Global Research in International Political Economy (GRIPE) for comments. We acknowledge financial support from the Social Sciences and Humanities Research Council of Canada.

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1 Introduction

Democratic societies do not suffer from a lack of good policy ideas. There are countless proposals for policies that relevant experts agree would result in considerable welfare gains, and that polls indicate democratic majorities would support. Decarbonization initiatives, health regulation, and the loosening of various occupational licensing requirements are commonly cited examples. Yet such *prima facie* commonsense policies often fail to be enacted, no matter how large the resulting benefits. The explanation for why first-best policies fail to be adopted often takes a familiar form: reforms have distributional consequences, and even when the winners win more than the losers lose, the latter are nonetheless able to block reform.

Political economy theory offers one straightforward solution for addressing this impasse: compensate the negatively-affected groups for their losses. If the proposed reform is truly welfare-enhancing, then combining it with such compensation would still leave the rest of society better off. We refer to this option as a buyout: a large-scale public compensation scheme that renders the interest group on the losing side of a reform "whole," in exchange for agreeing to a policy change that it would otherwise block. Buyouts are financed by borrowing against future benefits from reform. In this article, we take a first step towards offering a theory of buyouts as a policy tool. We review some past examples of buyout proposals, both successful and not. We then gauge the level of public support for buyouts, and what it depends on.

Buyout schemes can fail because of opposition from the democratic audiences who end up footing the bill for compensation, or from the targets of buyouts themselves, who may have reason not to trust the scheme. We examine both sides of the issue. First, we ask: if democratic audiences support a given welfare-enhancing reform, do they also support the significant compensation that may be the only means of achieving it? If not, what are the main objections to such buyout schemes among the general public? In the second instance, buyouts schemes are sometimes opposed by potential recipients on the grounds that the promised compensation may later be rescinded. This leads us to ask whether public attitudes appear consistent with such time-inconsistency. Specifically, do voters who support buyouts also support removing compensation once the reform is achieved?

We design a series of survey experiments to get at these questions across two highly distinct policy domains. The first concerns phasing out coal energy. Coal-fired power plants cause severe health problems like cancer and respiratory illnesses, which cost the US an estimated \$309 billion a

year in healthcare costs alone—not to mention its effects on climate change.¹ Yet the coal industry has successfully opposed phasing out coal-fired power plants, which still account for nearly a third of US energy consumption.

Our second case considers simplifying tax filing: reform of the US tax code under which most US citizens could file their returns automatically, using information the IRS already has about their income, would save an estimated \$2 billion annually in taxpayer time spent filling out forms, and government time spent processing them.² Yet every year, the US tax preparation industry spends over \$30 million lobbying to successfully stymic such reforms.

On their face, both settings constitute plausible cases for a public buyout. Were it not for highly mobilized interest groups, these reforms would already have been passed. And the total social benefits of reform outweigh the likely amount of compensation needed to make the holdout interests "whole." Reform combined with a buyout thus constitutes a Pareto improvement. We ask, how do domestic audiences perceive the case for and against such a proposal? We consider baseline levels of support for a buyout of each industry, and how different features of the proposal affect this support. In each case, we begin by randomly varying who the compensation recipients are: workers or the industry. We also randomize a set of counterarguments, to see which appears to weigh most heavily in individuals' reasoning: respondents read an argument about either moral hazard or government intervention, or are assigned to a control condition. We also collect respondents' written-in explanations for resisting the buyout proposal, which we rely on to design our subsequent studies.

One takeaway from these submitted explanations is that individuals perceive the case for and against buyouts primarily through a normative lens, rather than one of economic efficiency. Some believe that the coal industry and the tax software industry deserve to be compensated if government policy is responsible for making their jobs redundant. Others believe that these market actors have been blocking beneficial reforms and harming society, and thus do not deserve any compensation. In both cases, the rationale turns on a question of deservingness, akin to what philosophers refer to as "moral desert" (Lamont, 2017).

To further unpack these attitudes, we ask respondents to rank the main reasons for opposing

¹Estimate based on Machol and Rizk (2013). For a comparable approach to health costs of coal-fuelled power, see Epstein et al. (2011). For estimates of the combined social cost of coal on both health and climate change outcomes, see Grausz (2011).

²See, among others, Goolsbee (2006); Liebman and Ramsey (2019); Treasury (2003). For a recent treatment in the popular press, see Lowrey (2021).

buyouts, where we include two proxies for moral desert, alongside three other recurrent counterarguments: moral hazard, excessive government intervention, and the need to preserve jobs in the
industry at issue. We then attempt to further unpack the normative reasoning that individuals
appear to rely on in evaluating the case for buyouts. The most common distinction struck by moral
psychologists examining individual moral reasoning is between deontological and consequentialist
judgements. In a subsequent study, we thus use a standard battery of questions to classify respondents on a spectrum across these two ideal types, to see whether this distinction offers further
traction on attitudes towards buyouts, which can be thought to demand an ethical compromise in
pursuit of greater future benefits. We also test the relation between support for redistribution and
support for buyouts, as a way of measuring the extent to which buyouts are perceived as a form
of redistribution that is owed to those on the losing end of reforms.

We end by examining concerns over credible commitments often expressed by potential recipients of buyouts, and growingly cited in the literature on economic transition (Gazmararian and Tingley, 2022). According to this view, recipients of transition funds often fear policy reversals, which may lead them to turn down otherwise beneficial settlements. To measure how warranted such fears are, we ask all respondents how supportive they would be of rescinding the compensation tied to a buyout once the reform was achieved. Our intent is to measure how much public (dis)approval democratic leaders would face if they broke their commitments to an industry following a buyout.

The analysis yields four key findings. First, and most broadly, buyouts enjoy significant support: even in the case of politically-charged issues like coal phase-outs, we find that buyout schemes can win the approval of democratic majorities.

Secondly, this support for buyouts varies across partisanship: Democrats express consistently more support than Republicans, under all contexts. This divide perdures when we abstract away from concerns over the fiscal burden on taxpayers and government intervention in the economy using a third vignette, in ways that appear to speak to each group's deep-seated non-material beliefs. Beyond the importance of partisanship, however, support for buyouts of interest groups depends a great deal on aspects of program design. Buyouts that offer compensation to individual workers, rather than companies, enjoy significantly more support across the partisan spectrum.

Third, the chief objection to buyouts appears to be normative in character: individuals are loath to offer compensation to market actors who are perceived as not "deserving" compensation, even if this would result in welfare improvements. Such "moral aversion" seems to dominate other

salient concerns, like moral hazard. Yet these objections are not easily reducible to deontological versus consequentialist reasoning.

Fourth, the concern cited by potential recipients of buyouts over the credibility of compensation schemes finds support in our survey of individual attitudes: for both coal and tax industry buyouts, a majority of respondents are not opposed to reneging on the promise after it is made. Those who are most in favor of the reform, moreover, are significantly more likely to support reneging on compensation as soon as that reform is passed. Conversely, what pressure there is against reneging comes from those who do not support the reform in the first place. The implication is that there may not be a coalition that is both willing to offer a buyout, and that can be counted on to continue delivering compensation once the reform is achieved. This has considerable implications for the optimal design of buyouts. The level of support for reneging also rests on normative reasoning: in this case, those more inclined to consequentialist reasoning are significantly more likely to favor suspending compensation than those who score high on deontological reasoning.

These findings contribute to a number of ongoing debates across policy and political economy theory. Chiefly, the issue of how to address stalled welfare-enhancing reforms has taken on unprecedented urgency with the acceleration of climate change. A number of policies have been proposed to slow down and reverse climate change, from implementing carbon taxes and carbon credits to phasing out coal-fuelled power plants and passing clean energy targets, all of which enjoy overwhelming support among climate change experts (Stokes, 2020). Yet these commonsense policies have often failed to pass in the face of political mobilization by incumbent interests in legacy electric utilities, as well as fossil fuel and transportation industries, and their respective labor unions. Indeed, a number of studies have suggested that distributional conflicts, rather than e.g. collective action, is the binding constraint on ambitious climate legislation (Colgan, Green and Hale, 2021; Aklin and Mildenberger, 2020; Harrison, 2015). In response, scholars have begun looking at ways in which a transition away from fossil fuels to greener energy sources might be facilitated through large-scale compensation of those negatively affected by the shift (Gaikwad, Genovese and Tingley, 2020; Kono, 2020), contributing to a movement that has coalesced under the banner of "just transition" (Newell and Mulvaney, 2013). While the US is not among them, a number of countries have resorted to precisely such mass compensation in the effort to phase out coal, one of the two cases we focus on (Meckling and Nahm, 2022).

While this recent focus on climate change is understandable, the premise of this article is that it is useful to conceive of climate compensation as merely one instance, among many, of a policy response to a fundamental challenge identified by the study of political economy: how can a benevolent policymaker push forth welfare-enhancing reforms in the face of resistance from concentrated interests? One reason for this broader lens is that past attempts at analogous schemes in areas like trade policy and agricultural subsidies can inform current attempts at using similar policy schemes to tackle blocked reforms in the fight against climate change. A second reason is that, as we argue, we should expect future proliferation of blocked reforms across a range of issue-areas. The multiplication of access points to policymakers and an increase in firm-level lobbying expenditures has improved the ability of private interests to mobilize on narrow policy issues and block socially beneficial reforms.

Taken together, the findings offer support for the use of buyouts in tackling select blocked reforms. Yet they also highlight the conditions that must be met to obtain an endorsement for a buyout from the two main actors involved: voters and interest groups.

2 Buyouts in Theory

The ability of small concentrated interest groups to dominate larger, but more diffuse, societal interests is the bread and butter of the field of political economy, which has long been interested in identifying settings where rent-seeking behavior by concentrated interests results in suboptimal outcomes.³ One implication of this large body of work, and the premise of this article, is that the binding constraint on progress in democratic societies is not a dearth of innovative policies, so much as the political inability to implement the policies that have already been put forth.

2.1 The origins of blocked reforms

Groups mobilizing to block welfare-enhancing policies often start out serving the public interest. Some exogenous change, following technological innovation or new information, then becomes grounds for change, which these vested interests oppose because it would hurt their profits. When this happens, the same group that initially benefited society finds itself holding back further progress.

This pattern describes both cases we focus on in our analysis. Coal was once an affordable

³In *The Wealth of Nations*, Adam Smith famously observed that such rent-seeking was invariably the topic of any conversation between people of the same industry: "People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices."

source of energy that fueled global industrial progress; the tax preparation industry initially arose to meet a real need on the part of Americans facing the arduous task of filing their taxes. In another example which we outline below, government efforts to reduce agricultural subsidies in advanced economies were originally put in place in the interwar period in response to price volatility that financial markets of the time could not hedge against. These subsidies led to the entrenchment of interest groups that blocked the removal of government support when market conditions should have allowed for it. In another instance from the same period, the Jones Act mandates that any goods shipped between two US ports must be transported on a US-built, US-flagged, and US-crewed vessel. It was put in place in the wake of WWI for reasons of national security. It is generally acknowledged that repealing it would now result in annual savings of an estimated \$700 million in ship-building and fuel costs alone, and improve the government's ability to respond to crises like floods and hurricanes. Yet the US shipbuilding industry has actively lobbied to block its repeal for the last 30 years. In all these instances, what was once a sensible outcome grew less sensible over time. The war ended, ways of simplifying tax filing arose, and new information about the negative spillovers of coal energy on health and climate change emerged.

Yet these developments were not acted on. As the foundational work of North (1991) established, suboptimal institutions need not disappear in the face of preferable alternatives, if in the meantime actors have emerged who benefit from the continued existence of these institutions. These groups can mobilize to pressure government, or they can act to suppress new information altogether. When asbestos was found to be a carcinogen, or when studies highlighted the widespread health consequences of particulate matter produced by coal plants, the relevant interest groups stymied the release of this information, and offered conflicting findings. Empirical evidence has long linked lobbying efforts by private sector interests with misinformation and delays in the risk assessments necessary to design optimal regulation (Muggli, Hurt and Repace, 2004). Hold-out interests that block welfare-enhancing reforms, moreover, seldom make their case on the basis of self-interest alone. More often, they invoke social values, from state security and national pride to health and safety. At times, they do so by relying on misinformation.⁶

⁴The Jones Act is formally known as the US Merchant Marine Act of 1920. The specific requirement is that the crew be made up of 75% US-nationals.

⁵See Lewis (2013); Slattery, Riley and Loris (2014) for a fuller discussion.

⁶See Stokes (2020, 220-221) for examples, as when the fossil fuel interest groups in Ohio aligned against state measures supporting renewables began running ads threatening that China was seeking to control Ohio's electric utilities. These false claims were then repeated by legislators.

Several factors may explain why blocked reforms of the kind we examine in this article have been on the rise since the 1980s. Legislative capture, a proliferation of access points to policy, and an increase in firm-level lobbying are chief among these. Evidence from the last 40 years, looking especially at the US, suggests an increase in the pervasiveness of legislative capture across financial regulation, land use regulation, intellectual property protection, and occupational licensing (Lindsey and Teles, 2017; Gulotty, 2020; Mihályi and Szelényi, 2019). Observers have also linked an increase in "capture" to a rise in corporate profit margins.⁷ Looking ahead, the recent turn towards greater government intervention in the economy through a wealth of industrial policy measures makes it likely that interest groups will mobilize around the maintenance of these support policies into the future.

With the fragmentation of policy, a growing number of government agencies now have overlapping mandates. This has had the effect of multiplying the access point to policy, which benefits
those groups best able to take advantage of such access. There has also been a notable rise in
firm-level lobbying. The ability to lobby for highly specific tariff rates, for instance, has meant that
more lobbying for trade protection is now done by individuals firms, rather than trade associations
or industry groups (Kim, 2017; Osgood, 2017; Madeira, 2016). The same is increasingly true of
health and safety standards, which can be customized to the particular production advantage of
a single firm. As a result, the interests of companies are less likely to balance each other; the
import-competing firms and export-oriented firms that rely on imported inputs no longer need to
hash out their clashing interests within the same trade association. They can both shape policy
toward their individually preferred outcome. In sum, for a number of complementary reasons that
have increased the relative bargaining power of corporate interest groups, there is reason to expect
a proliferation of cases in which concentrated groups prevail over diffuse societal interests.

2.2 Buyouts as a solution to stalled reforms

A solution to reforms blocked by vested interest groups was proposed more than 80 years ago by Kaldor (1939), and subsequently refined in Hicks (1939) and Hicks (1940). In what has come to be called Kaldor-Hicks compensation, and which we refer to as public buyouts, the gains accrued from the winners are used to balance out the losses incurred by the losers of a given policy. As Kaldor observed, "even if all those who suffer as a result [of a welfare-enhancing reform] are fully

⁷See, for example, "Too much of a good thing". The Economist. March 26, 2016. https://www.economist.com/briefing/2016/03/26/too-much-of-a-good-thing.

compensated for their loss, the rest of the community will still be better off than before." In that initial sketch, Kaldor turned to the paradigmatic case for concentrated interest groups blocking welfare-enhancing reforms: trade liberalization. He invoked the British Corn Laws, which opposed consumers of bread, who stood to gain from liberalization, to aristocratic landowners, who stood to lose from it.⁸

Trade scholars traditionally describe lower trade barriers as "potentially Pareto-improving." What is understood by this is that conditional on some redistribution from the winners to the losers, everyone could be made at least as well off as they were absent liberalization, and others would still be better off. Given how heroic an assumption effective compensation turns out to be, such settings are more accurately described as Kaldor-Hicks improvements. These obtain as long as total welfare increases, without requiring that everyone remain at least as well off as they were ex ante. Yet in spite of how actual Pareto improvements in the social world are few and far between, claims of "potential Pareto efficiency" are far more common than references to Kaldor-Hicks improvements. 10 This semantic preference is revealing. Political economy scholarship has long brushed aside what actual compensation from winners to losers would entail, focusing instead on changes in the overall size of the pie to identify desirable reforms. Looking at the case of trade liberalization, this led scholars to overlook the long-run distributional effects of lowering trade barriers, an omission which started being redressed in the late 1990s, 11 and which came to a head following a string of recent findings showing the persistent effects of import competition on US regions "left behind" by trade liberalization. 12 Hicks was prophetic in this respect. As he wrote in 1939:

"Yet when such reforms have been carried through in historical fact, the advance has usually been made amid the clash of opposing interests, so that compensation has not been given, and economic progress has accumulated a roll of victims, sufficient to give all sound policy a bad name."

⁸Explicit proposals for the direct compensation of land owners were in fact proposed, and may have accelerated repeal of the Corn Laws had they been adopted. See Baring (1908).

⁹For a discussion of this preference in the economic literature, see Mathis (2009).

¹⁰To illustrate, there are over 50 times more scholarly articles mentioning Pareto improvements than Kaldor-Hicks improvements in the last 5 years (Google Scholar).

¹¹For a review, see, e.g. Kapstein (2000).

¹²See Autor, Dorn and Hanson (2013). Subsequent work has begun describing the considerable obstacles inherent in trying to effectively compensate those on the losing side of trade liberalization (Claeys and Sapir, 2020; Kim and Pelc, 2019).

Over the past few years, trade scholars have increasingly converged on a similar verdict. Although theory suggests that the gains from trade would have been sufficient to offer compensation to those hurt by the removal of trade protection, governments have largely failed to do so.¹³ As a result, a "sound policy" has been given a bad name, and political opportunities have arisen for policymakers willing to take an anti-trade stance (Feigenbaum and Hall, 2015).

Referring again to the Corn Laws, Kaldor (1939) went as far as outlining how compensation might work, by taxing the consumers of bread who benefited from lower prices, and compensating the owners of land.¹⁴ Yet Kaldor then deliberately steered clear of any pronouncement on whether compensation was therefore desirable, claiming that this was a "political" matter about which the economist "could hardly pronounce an opinion."

We pick up where Kaldor left off, delving into the politics of the question. We examine the attitudes of domestic audiences towards compensation of hold-out interests, what these attitudes depend on, and how they might affect the thinking of policymakers vying to push through welfare-enhancing reforms.

3 Buyouts in Practice

What do buyouts look like in practice? Before outlining our theoretical expectations, we briefly consider past buyout proposals in two domains—agriculture and coal—and their varied outcomes.

3.1 Buyouts of Agricultural Supports

The issue-area that has likely seen the greatest number of buyout attempts, with considerable variation in their success, is agriculture. Much of the current farm support system across developed countries was put in place during the inter-war period, when aggregate demand was growing faster than supply. In response, governments implemented a range of price support measures to help farmers and increase output, starting with the Federal Farm Board in 1929 (Bowers, Rasmussen and Baker, 1984). When productivity rose dramatically in the postwar period thanks to technological change, ¹⁵ those support measures remained. As noted above, interest groups formed to preserve

¹³While programs like the US' Trade Adjustment Assistance (TAA) and the EU's Globalization Adjustment Fund (EGF) exist to do just that, they are often underfunded and underused.

¹⁴ "In this way, everybody is left as well off as before in his capacity as an income recipient; while everybody is better off than before in his capacity as a consumer" (Kaldor, 1939).

¹⁵Advances included the use of non-organic fertilizer, better seed technology, and more efficient machinery.

the support measures. The result has been oversupply, inefficient production, and artificially high consumer prices. ¹⁶ Efforts to dismantle farm support systems began immediately after WWII, against the background of international trade negotiations. One of the earliest such attempts came in 1949, pushed by the Democratic Secretary of Agriculture Charles Brannan. Referred to as a cash-out reform, it attempted to dismantle price guarantees, which were highly distortionary, with direct cash payments to farmers (Orden, Paarlberg and Roe, 1999). It was endorsed by the National Farmer Union, but was ultimately judged too expensive, and scuttled by Republicans, who still hoped to pass legislation getting rid of price supports without extensive compensation. ¹⁷

This would prove the model for a half-dozen similar attempts at reforms of the US farm bill. Republicans pushed for reform on grounds of economic efficiency; in response Democrats demanded high compensation, which Republicans denied on budgetary grounds. The bipartisan Boschwitz-Boren proposal in 1985 was a case in point: it dismantled all support for agricultural commodities in exchange of direct transition payments to farmers, phased out over 6 years. The Congressional Budget Office estimated the cost at USD 51 billion over the first three years—a spending increase that existed by design, reflecting the up-front cost of the proposed buyout—and Republicans rejected it for being too expensive. In a recurrent pattern, the continuation of the program soon cost more than the buyout would have, at USD 25.8 billion in its first year alone, owing to a decrease in market prices.

Yet over the postwar period, the US did in fact succeed in gradually liberalizing and compensating some specific agricultural sectors, though not others. The US partly or entirely bought out and liberalized agricultural quotas in tobacco, wheat, corn and rice; but it has come short of doing the same for sugar, peanuts, and dairy (Schmitz, Haynes and Schmitz, 2016; Orden, Paarlberg and Roe, 1999; Orden, 2005). What accounts for this variation between sectors remains an open question. One possibility is that highly concentrated interest groups are better able to block policy change, but that they also represent easier targets for negotiated buyouts. Along these lines, some have argued that the nature of the benefits being removed through reform matters: narrowly defined benefits may thus be easier to take away than broader support policies, precisely because the group to be compensated is easier to identify and reach a settlement with (Orden, 2005).

Despite the difficulties involved, agriculture in developed countries remains the domain where

¹⁶For a broader discussion, and links of farm bill reform to trade liberalization, see Paarlberg (1997).

¹⁷Recall that Democrats at this time still represented the producers of tobacco, wheat, and cotton, which were lower productivity crops than those grown in the Republican-controlled midwest (Orden, Paarlberg and Roe, 1999).

buyouts are most frequent. Following the 1988 Canada-US Free Trade Agreement, the Canadian government thus bought out Canadian wine growers, paying them \$8,100 per acre to pull out "undesirable," low quality vines, in exchange for removing protectionist measures, as per Canada's commitments under CUSFTA. Over 70% of vineyards in British Columbia agreed to the buyout, and pulled out their grapes to switch to other crops. Those that remained were the more competitive vineyards that produced higher quality wine, and who were able to survive without continued protection.¹⁸ In sum, the Canadian government succeeded in "quieting"—to use Meckling and Nahm's term—the interest group that until then had resisted liberalization most staunchly.

3.2 Buyouts for Climate Change: Coal-Fired Power Plants

A recent surge of interest in buyout-like schemes has resulted from the urgency of large-scale reforms in the face of climate change. These have often been stymied by politically powerful interest groups in fossil fuels, transportation, and legacy electric utilities (Stokes, 2020). In this vein, Gaikwad, Genovese and Tingley (2020) show that targeted compensation schemes are more popular among residents of coal-producing regions, while diffuse compensation, like green technology subsidies, finds more favor among the general public. Kono (2020) finds that even diffuse compensation schemes like unemployment insurance increase legislators' willingness to support carbon restrictions. Much of the thinking around the different means of compensating geographically-concentrated populations negatively affected by decarbonization policies has coalesced around the banner of "just transition" (Newell and Mulvaney, 2013). Even among the net beneficiaries of decarbonization measures, a normative concern for fairness might lead to higher support for climate change mitigation policies whose costs are distributed more fairly (Bechtel and Scheve, 2013; Bechtel, Genovese and Scheve, 2019), suggesting that a public buyout could in fact increase average support for the underlying reform.

The policy domain which we examine most closely through our survey experiments is that of coal-fired energy. In light of coal's contribution to climate change, many developed countries have tried to reduce their reliance on coal-fired electricity in the last decade. Some have done this by effectively buying out the industry's workers, and shutting down plants. Countries like Canada,

¹⁸The Canadian government also subsidized the planting of higher quality *vinifera* vines for those growers who were willing to transition. The acreage devoted to wine dropped by more than two thirds, from 3,456 acres in 1988 to 1,047 acres in 1989. The profitability of those remaining wine growers grew. Today's Canadian wine industry is largely thriving (Ross, 1995).

Australia, and Germany have phased out their coal industries by offering mass compensation packages to coal workers, in ways that amount to a public buyout. The same idea has been proposed for the US, but has yet to gain a serious foothold in the political debate.¹⁹

The Canadian province of Ontario took this approach when it shut down its last coal plant in 2014. The province of Alberta then followed suit, modelling its phase-out on Ontario's, with a fund set aside to top up affected workers' income to 75 per cent of a worker's previous earnings following their layoff, to be paid from a carbon tax. Alberta's calculations of the cost of a buyout allow us to run our own crude estimate of how much an equivalent buyout of US coal-fuelled power plants would cost. Using this approach, we arrive at a figure of USD 80 billion, which we use in the survey experiment.²⁰

These estimates suggest the right order of magnitude, though precise calculations of how much it would cost to render the coal industry "whole" are highly contingent on modelling assumptions. Relevant to our discussion, the actual cost of a buyout is ultimately the outcome of bargaining between a government and an interest group.

Australia has also been holding active policy discussions to phase out its coal-fuelled power plants.²¹ Meckling and Nahm (2022) describe how a buyout of coal workers in Germany was

¹⁹For exceptions, see: Gil Friend, Felix Kramer. 2014. "Deal of the Century: Buy Out the US Coal Industry for \$50BN" *The Guardian*. Stephen L. Kass. June 3, 2016. "The federal government should buy coal plants, shut them down and pay to retrain their employees" *Washington Post*. Brad Plumer. Jun 7, 2016. "A not-so-modest climate proposal: why not just buy out the US coal industry?" *Vox*. Meckling and Nahm (2022, 514) contrast the successful coal phase-out in Germany, which relied on a large compensation package, to the case of the US "where—in the absence of compensation-based bargains—coal regions and firms continue to actively resist federal climate policy."

²⁰Alberta agreed to pay the 6 of its 18 plants that would have remained operating after the 2030 mandated phaseout 97 Million CAD annually for 14 years to cease activity by 2030. In 2016, the US produced 1,239,149 GWh of
energy from coal. The Alberta buyout paid their six coal producers 73,465 CAD for each GWh of annual energy
produced. Multiplying this figure by the annual amount of energy from coal in the US amounts to CAD 91 billion,
or about USD 72 billion. Updated for inflation, and taking into account the compensation that would be required of
the freight rail industry that has also lobbied against shut down of coal plants (70% of current rail traffic in the US is
devoted to coal (Council et al., 2010)), we arrive at a highly approximate figure of USD 80 billion, which we rely on for
the purpose of the survey. For perspective, an estimate in 2014 put that number at USD 50 billion (Gil Friend, Felix
Kramer. 2014. "Deal of the Century: Buy Out the US Coal Industry for \$50BN" The Guardian.) A re-examination
two years later noted that this amount did not include miners' pensions. See: "The federal government should buy
coal plants, shut them down and pay to retrain their employees" Washington Post. Stephen L. Kass. June 3, 2016.
"A not-so-modest climate proposal: why not just buy out the US coal industry?" Vox. Brad Plumer. Jun 7, 2016.

²¹ "How Australia can phase out coal power while maintaining energy security." The Conversation. https://theconversation.com/how-australia-can-phase-out-coal-power-while-maintaining-energy-security-152747

successful when other approaches failed. Similar buyout schemes have been put forth in Poland, a major coal producer. India has also proposed mass compensation schemes targeted at its 1.2 million coal workers, in an attempt to transition away from coal energy. Those efforts have been buoyed by a growing green energy sector (IISD, 2018).

4 Theoretical Expectations

Kaldor-Hicks compensation is the simplest means of turning a Kaldor-Hicks improvement into a Pareto improvement, whereby everyone is at least as well off as they would be absent the reform. Yet Kaldor himself was ambivalent about when compensation of those on the losing side of reform is called for. How might a policymaker approach this question? The premise we advance is that this comes down to democratic preferences: while theoretically sound, buyouts may raise a number of material and non-material concerns, and policymakers fear public backlash as a result. How well-founded are such concerns? Specifically, if domestic audiences nominally support a reform blocked by a vested interest group, under what circumstances would they also support buying out that group to push through reform?

To address this question, we begin by examining how varying the targets of buyouts affects public support for buyout schemes. Second, we hypothesize three dominant counter-arguments to buyouts, and seek to measure how prevalent these are in public attitudes. Third, we unpack the normative reasoning that people appear to rely on in assessing whether to buy out interest groups that block reform. Finally, we consider the credibility of buyout schemes in democratic contexts where the public's preferences may raise time-inconsistency problems.

4.1 Policy Design: Who Gets Compensated?

A key aspect of policy design for large scale public buyouts is who the precise recipients of compensation are. Our expectation is that insofar as respondents are resistant to compensating groups that block reforms, they will be more open to compensating individuals, rather than companies. In formulating these expectations, we are guided by research in social psychology that suggest how people tend to hold more positive assessments of specific individuals than collectives of others, even when they lack any relevant information about the individuals or groups they are assessing (Critcher and Dunning, 2014). If so, survey respondents should be better able to identify with the fates of individuals, in particular job loss affecting individual workers. By contrast, respondents

may have more negative feelings about the companies and industries that employ those workers. In sum, we expect that domestic audiences will feel greater sympathy for the plight of workers belonging to vested interest groups than corporations belonging to these groups, and that they will be more willing to compensate individuals negatively affected by reforms. Insofar as we do observe a difference between willingness to buy out companies vs. workers, this may thus speak to the underlying source of reticence against buyouts, insofar as these are seen as benefiting unsympathetic market actors.

Below, we test this expectation using a survey experiment where we randomly vary who receives compensation in different buyout schemes: the *industry* or *workers*. If respondents are on average more sympathetic to the losses suffered by workers, then we expect they will be more favorable to the buyout proposal when it is linked to compensation for workers.

4.2 Counter-Arguments to Buyouts

To gauge the extent to which large scale public buyouts could be supported by the voting public, we rely on several approaches to weigh the relative importance of possible arguments *against* buyouts. We distinguish between three dominant concerns: moral hazard, moral aversion, and opposition to large-scale government intervention.

Moral Hazard Negotiated buyouts of interest groups do not take place in a vacuum. One of the main considerations in deciding whether compensation is a desirable means of pushing through a beneficial reform in a given case is how it might subsequently affect other similar cases. In this way, the most theoretically well-grounded argument against buyouts is a concern over moral hazard. By offering compensation to a given vested interest group, one might embolden the same group, or others like it, to hold out in future instances, in the hope of a similar payout. A policy of systematically buying out recalcitrant interest groups might thus unintentionally increase the number of recalcitrant interest groups, instead of reducing it.

Moral hazard might be thought to loom especially large if the reform being sought is of a recurrent type, as with health regulation of chemical products, which affects hundreds of products, and which is often held up by narrow interest groups. For instance, there has been a longstanding push in the US to classify both formaldehyde and hydroquinone as carcinogens. A valid concern may be that by "paying to regulate" one chemical, government agencies may embolden producers of the other to hold out longer, in expectation of similar compensation. In this respect, the more

"one-off" a policy proposal is, the less likely it is to change expectations by setting a precedent for other interest groups to adapt to. Similarly, the longer lasting a policy stalemate over a given reform, the fewer analogous cases there are that might treat it as precedent. Most generally, the concern over moral hazard speaks in favor of approaching buyouts on a case-by-case basis, rather than relying on them as a systematic solution to blocked reforms.

The weight of moral hazard is thus likely to vary between sectors, but also over time. In the past, patent buyouts have been used to place technologies with high innovation potential in the public domain, in what amounts to a monopoly buyout. A famous early example featured France buying the patent for Daguerreotype photography in 1839 and putting it in the public domain, which led to a string of rapid innovations in the field of photography (Kremer, 1998). Today, given the emergence of "non-practicing entities" (more commonly known as patent trolls), which invest in patents to claim license fees rather than exploit them directly, the notion of public patent buyouts appears more fraught, and more exposed to moral hazard. The expectation of public buyouts would likely increase speculation by non-practicing entities, and the associated negative spillover effects.

Moral Aversion A second argument against buyouts is a concern that these effectively 'reward' interest groups for the very behavior which the reform seeks to abolish. Normative objections of this type are all the more likely given how rent-seeking groups that seek to manipulate public policy for their own gain are often perceived as disreputable. One thinks of the use by the news media of "Big Oil," "Big Tobacco," or "Big Pharma" to designate groups that wield disproportionate political power and use it to extract rents. Democratic audiences may be predisposed to suspicion towards concentrated political power. Political philosophers speak of "moral desert" in this respect, as an approach to distributive justice arguing that what benefits people receive should be a reflection of what they do, and how this affects their deservingness (Lamont, 2017). Individuals who see these groups as 'bad actors' might then have principled objections to programs that would offer these actors large amounts of public funds to get them to cease activities which already result in welfare losses. In this view, eventual material benefits may not warrant the normative cost associated with paying off socially undesirable actors.²²

²²Moral hazard and moral aversion are not mutually exclusive. Moral hazard may loom especially large when dealing with normatively questionable actors. And moral aversion may be one heuristic by which individuals grasp at moral hazard concerns. On moral heuristics, see Sunstein (2005).

Opposition to Government Intervention A third argument against buyouts is linked to resistance to government intervention. Buyouts require governments to play a significant role in picking which reforms ought to be compensated, and to what amount. Domestic audiences may feel that due to their sheer scale, buyouts grant too large of a role to governments. Indeed, if legislative capture is complete, then even attempts to buy out interest groups may themselves fall prone to interest group pressure. Governments may choose to provide compensation for reforms that could have been achieved without resorting to compensation; or they may 'overpay' powerful interest groups due to the same political economic considerations that lead to blocked reforms in the first place.

We rely on several different approaches to weigh the prevalence of these three main counterarguments across the domestic audience. First, we use a series of vignette experiments in which we randomly present counter-arguments to some survey respondents, and we estimate how much each of those arguments dents support for a buyout scheme, compared to a control.

Second, while our main cases of interest relate to the American coal and tax preparation industries, we add a third vignette about a non-economic setting outside of the US context. There, we ask respondents whether they would support a deal that would offer amnesty and asylum in Switzerland to a foreign dictator, in exchange for the dictator giving up power and putting an end to a civil war. The aim of this third vignette is to abstract away from considerations of economic redistribution, and concerns about government intervention in the economy, while retaining considerations of moral aversion and moral hazard. If these considerations loom large in individual reasoning over buyouts, then attitudes towards asylum for dictators should be highly correlated with attitudes towards our two main buyout cases.

Third, recognizing that the public may support or oppose buyouts for different reasons than those offered by political economists, we elicit open-ended answers from survey respondents about the (potentially non-material) reasons that motivated their choices. Then, we use these written-in explanations to design a follow-up survey where we ask respondents to consider a broader set of counter-arguments related to deservingness, moral considerations, and the desirability of industry protection.

4.3 Types of Moral Reasoning

As we show below, an inductive exploration of these written-in explanations of respondents' concerns over buyouts suggests that people's views on the topic are largely driven by normative considerations.²³ To unpack the type of moral reasoning that people engage in when evaluating a buyout proposal, we build on a key distinction drawn by moral philosophers and psychologists, between deontological and consequentialist reasoning. The latter focuses on the desirability of outcomes, while the former highlights the probity of the means used to achieve those outcomes. Much of this literature builds on the famous trolley problem, a thought experiment in which sacrificing one life can save a number of other lives (Bruers and Braeckman, 2014).

In the case of buyouts, a similar fundamental tradeoff is present: compensating a group that is blocking socially beneficial reform for self-interested reasons may run counter to first-order moral reasoning; yet doing so may be the only means of achieving a reform leading to a net beneficial outcome. Deontological reasoning would thus seem to push towards rejecting the buyout scheme out of hand; by contrast, consequentialists may be more open to biting the bullet of compensating a rent-seeking group to achieve a favorable final outcome, even if this "rewards" intransigent market actors for their intransigence. We are also interested in testing the relationship between ideal types of moral reasoning and attitudes towards reneging on buyout promises, which we outline next.

4.4 Credibility of Compensation

So far, we have focused on the reasons that could justify people's ex ante opposition to buyout proposals. Yet resistance to buyouts may also come from buyout recipients themselves. While political economy theory assumes that the groups opposing reform can be rendered "whole", a number of recent studies of compensatory schemes have highlighted the difficulty of actually doing so. Studies of active labor market policies that offer targeted compensation to individual workers have highlighted the challenges that such programs face, from stigma to poor information, often resulting in low take-up of cash assistance and labor adjustment programs (Currie, 2004; Hernanz, Malherbet and Pellizzari, 2004; Sheran and Swann, 2007; Kim and Pelc, 2021). More recently, growing attention has been paid to a specific challenge of compensatory schemes with respect to credibility. Gazmararian and Tingley (2022) thus demonstrate how recipients of climate transition assistance often fear policy reversals, whereby promised compensation ex ante may be rescinded ex post. Indeed, as Fernandez and Rodrik (1991) argued long ago, any "transfer scheme may

²³We provide representative examples of these written-in comments in the empirical section below.

be time-inconsistent, providing incentives to the *ex post* majority to renege on the agreement." Governments thus face a classic problem: they may commit to a costly buyout as a means of tackling hold-outs, yet once the reform is achieved, they have an incentive to rescind on their prior commitments.

Such policy reversals are not uncommon, including in the buyout setting we examine most closely, over coal energy phase-outs. As we recount in Section 3.2 above, in 2016, the government of Alberta, led by the left-leaning National Democratic Party, pledged a 1.1 billion fund to either shut down or convert coal-fired plants. The plan, which was hailed as a model of cooperation with fossil fuel workers and labor unions, 24 was to be financed by a carbon tax which would raise \$5.3 billion, of which nearly a billion was slated to assist the province's coal workers and affected communities. In anticipation of the plan going into effect, a number of coal plants started shedding workers and investing in conversion to natural gas. Then, Albertans voted in the United Conservative Party, which was quick to walk back the commitments: the carbon tax was axed, and the promised compensation for coal workers was thrown into question. It remains in the balance to this day, resulting in considerable uncertainty for coal workers: as one such Albertan coal worker and labor union leader put it: "[If the province is going to kill the support program], then just say that that's the way it's going to be, and people being laid off ... can be able to plan their lives accordingly, not kind of wonder whether the supports will be there or not."²⁵ By contrast to Alberta, the government of Ontario has kept its commitment to coal workers following its own phase-out.

The concern over policy reversal is especially salient in the case of buyouts, the stated purpose of buyouts is to push through reform. Once this reform is achieved, there may be little reason to keep compensating the holdout interests that mobilized against it. Add to this the prevalent perception that the recipients of buyouts are "bad actors" who do not deserve compensation, and fears of policy reversal appear plausible. We argue that such fears should ultimately reflect the attitudes of democratic audiences. The question is thus, once reform is achieved, how tolerant are democratic audiences of rescinding the compensation that made the reform possible?

We test these expectations by asking all respondents how favorable they would be to rescinding the compensation given to the coal industry, or the tax software industry, once the desirable reform

²⁴See "Unifor helping to advance dialogue on Just Transition." https://www.unifor.org/news/all-news/unifor-helping-advance-dialogue-just-transition.

²⁵ "Alberta Created a Way to Help Fossil Fuel Workers. Kenney Is Wrecking It: Coal Workers Promised Transition Pay Are Left Hanging." https://thetyee.ca/News/2019/10/10/Coal-Worker-Help-Wrecked/.

was achieved. Especially relevant to the theory is how approval for the underlying reform relates to approval for rescinding the compensation required to achieve it. We are also interested how these attitudes towards reneging relate to our two ideal types of moral reasoning. Consequentialists may be expected to be more tolerant of reneging on prior commitments as soon as the objective was achieved and the reform was passed. By contrast, while deontologists may be more resistant to the idea of compensating rent-seekers in the first place, they may also be reluctant to break such a commitment once it is made.

We thus begin by testing the factors that affect public approval of buyouts, and then we examine public attitudes towards reneging on the promised compensation once the reform is passed.

5 Empirical analysis

We design a series of survey experiments to shed light on the four theoretical dimensions of buyouts highlighted above. To measure the level and determinants of support for buyout programs, we conducted three online surveys, each with a sample of 2000 American adults, which we recruited to meet population quotas by age, gender, Census region, and education, covering a total of 6000 respondents. Details on survey administration are reported in appendix.

We present five sets of complementary results. The first is strictly descriptive: who supports large-scale buyouts and amnesty programs, and what individual traits does this depend on? The second analysis is explanatory, leveraging randomized assignment to different treatment conditions, which allows us to ask whether program design affects support for buyout initiatives. Third, using the same randomized treatment approach, we test the weight of various counterarguments, to see which appear to sway individual attitudes the most. Fourth, we unpack normative objections to buyouts by studying how moral reasoning relates to attitudes towards the policy. Finally, we look at support for reneging on compensation offered, once the reform is achieved, and how it relates to the same moral reasoning ideal types.

In the appendix, we consider two additional questions of particular relevance to policy: are buyouts primarily seen as a means of reform or redistribution, and does learning about the possibility of a buyout affect people's approval of the underlying reform?

5.1 Case Selection: Coal, Tax, and Amnesty

We design a series of survey experiments to gauge the level and the determinants of public support for buyout in two principal domains: tax simplification and coal energy phase-out. Although trade liberalization and trade adjustment constitute the paradigmatic case for compensation following welfare-enhancing reforms, we purposefully do not include it among our vignettes. Trade barriers that remain after 75 years of negotiations in the international trade regime are most often still in place because the groups that benefit from trade protection have been able to mount arguments for it that transcend material interests. Coalitions between import-competing agricultural interests and environmental groups, or food safety protection groups, have arisen not only to pressure government policy, but also to affect consumer beliefs. Agricultural lobbies thus insist on the healthfulness and environmental sustainability of domestic products, while throwing doubt on the standards of foreign agricultural imports. The result has muddled the costs and benefits of reform, and any associated buyout scheme. To avoid this issue, we look for cases where the costs and benefits are readily quantifiable.

Our first buyout proposal relates to phasing out coal-fired power plants, where we highlight consequences for public health, rather than implications for climate change. The second case looks at the question of simplifying tax filing. The latter is meant to be the less politically fraught of the two. Indeed, when we test rates of approval for the underlying policy reform, Democrats and Republicans are no different in their approval of tax simplification. Yet as we show, they differ significantly in their support for buyouts as a means of securing such reform.

Our two vignettes also usefully differ in their geographic specificity. The coal industry is highly concentrated, while the tax software industry is more diffuse. Geographic concentration may matter in two ways that are relevant to our analysis. On the one hand, most respondents are unlikely to be directly affected by the health consequences of coal-fired power plants; but they are likely to be directly affected by the unavailability of return-free tax filing. On the other hand, groups that are highly concentrated may be easier to negotiate with and reach an agreement with, making a buyout more feasible. We thus vary the geographic specificity of our two cases to ensure that these considerations do not drive the results.

To complement our analysis of coal energy and tax filing reforms, we also consider a noneconomic setting outside of the US context. There, we ask respondents whether they would support a deal offering a foreign dictator amnesty and safe asylum in Switzerland, in exchange for giving up power and putting an end to a civil war. In looking at this third issue area, our goal is to abstract away from considerations of economic redistribution, and concerns about government intervention in the economy, while retaining considerations of moral aversion and moral hazard.

5.2 Support and Policy Design

We begin by estimating the level of support for buyout proposals, and examining how that support varies based on people's socio-demographic traits, as well as policy design. In particular, we are interested in assessing whether the target of the compensation scheme affects the level of support for large-scale buyout programs.

To do this, we asked survey respondents to read three short vignettes describing buyout programs: coal phase-out, tax simplification, and dictator amnesty. Then, we asked respondents to express their level of support for the proposed buyouts on a 0 to 10 scale.

The vignettes included two sets of randomized components. First, a control group of respondents was exposed only to a description of the buyout programs, while two treatment groups also read randomly assigned counterarguments. In the tax simplification and coal phase-out vignettes, one treatment arm was assigned to read a counter-argument about moral hazard. Another treatment arm was assigned to read a counter-argument stating that public buyouts are an example of excessive government intervention. In the amnesty case, respondents assigned to one treatment arm read a counter-argument about moral hazard, while others read a sentence arguing that the amnesty plan violated an ethical principle. The full text of the vignettes and corresponding counter-arguments is reported in Figures 1, 2, and 3.

Figure 1: Coal vignette

One third of the energy used in the United States comes from coal. Coal mining and energy plants cause severe health problems such as cancer and respiratory illnesses. Experts estimate that these health problems cost Americans \$309 billion a year.

{ The coal industry — Coal workers} oppose{s} shutting down coal power plants because it would {hurt their business — lead to job losses}. Through intense lobbying, they have pressured the government to keep coal plants running.

Some people say that the only way to close these coal plants is to compensate [the coal industry/ coal workers] for their losses. This would cost \$80 billion dollars now, but it would save Americans money in the long run.

Control: No additional text.

Moral hazard treatment:

Others say that if the government pays to shut down coal plants, it would encourage other [industries / workers] to lobby against beneficial reforms in the future.

Government intervention treatment:

Others say that if the government pays to shut down coal plants, it would be playing too large of a role in the economy.

Outcome question:

Do you agree that the government should compensate {coal companies — coal workers} for their losses in order to shut down coal plants? 0 means that you "Strongly Disagree." 10 means that you "Strongly Agree."

Figure 2: Tax vignette

Every year, Americans spend a lot of time filling out their tax returns, and a lot of money on tax software and services. The IRS has all the information it would need to fill out most people's tax forms automatically. This would save Americans \$2 billion a year in time and money.

 $\{ \textit{Tax software companies} - \textit{People who work in the tax industry} \}$ oppose automatic tax filing, because it would hurt their $\{ \textit{business} - \textit{income} \}$. Through intense lobbying, they have pressured the government to maintain the current system.

Some people say that the only way to simplify tax filing is to compensate {tax software companies for their losses — workers in the tax industry who lose their jobs as a result}, to convince them to accept this reform. This would cost the government \$10 billion now, but it would save Americans money in the long run.

Control: No additional text.

Moral hazard:

Others say that if the government pays $\{tax\ software\ companies\ --\ people\ who\ work\ in\ the\ tax\ industry\}$ to simplify tax filing, it would encourage other $\{industries\ --\ workers\}$ to lobby against beneficial reforms in the future.

Government intervention:

Others say that if the government pays {tax software companies — people who work in the tax industry} to simply tax filing, it would be playing too large of a role in the economy.

Outcome question: Same as for coal.

Figure 3: Dictator Amnesty vignette

In many countries, dictators brutally repress their citizens in order to stay in power. When dictators lose power, they are often sent to prison or killed.

Some people say that if we allowed dictators to retire safely, they would be less desperate to stay in power, and would use less violence to crack down against their citizens.

Control: No additional text.

Moral hazard treatment:

Others say that letting dictators avoid legal consequences encourages other leaders to resort to violent repression.

Ethical principle treatment:

Others say that it is wrong to let dictators get away with their crimes.

Outcome question:

Imagine that a foreign dictator is willing to give up power and put an end to a civil war. In exchange, he wants to avoid prison and retire safely in Switzerland. Should the United States support this kind of deal? 0 means that you "Strongly Disagree." 10 means that you "Strongly Agree."

Table 1: Correlations between individual-level support for buyouts across three policy domains.

	Coal	Tax	Amnesty
Coal	1		
Tax	0.55	1	
Amnesty	0.36	0.41	1

Second, in the tax and coal cases, we randomized the policy design by changing the identity of the groups who would receive compensation under the buyout program: "workers" or "industry."

The first insight from the survey experiment is that respondents are broadly supportive of buyout schemes. Across all treatment groups, 61% of respondents support a coal-phased with compensation, and just over 50% of respondents approve the tax simplification and dictator amnesty plans. 26

At the individual level, support for the schemes covaries to a great extent: individuals in favor of buyouts in one setting tend to favor buyouts in the other setting, with a bivariate correlations of 0.55 (see Table 1.) What is more striking still is how much support for these monetary compensation proposals covaries with support for *Dictator Asylum*, which rests on a different, non-monetary premise. The bivariate correlation is 0.36 with the coal buyout proposal, and 0.41 with the tax buyout. One plain interpretation is that views on buyouts are largely driven by the considerations that are common across these issue-areas. Given that the *Dictator Asylum* vignette abstracts away from economic concerns over taxpayer burden, and political concerns over government interference in the economy, the high correlation between that vignette and our two main cases of interest, coal plant phase-outs and tax filing reform, suggests that domestic audiences approach the case for and against buyouts on the basis of moral hazard and moral aversion. We investigate this possibility further in our analyses below.

The relation between socio-demographic traits and support for buyouts appears consistent across all three proposals. Figure 4 shows the estimated coefficients and confidence intervals from three linear regression models with four covariates. Of these, partisanship appears most relevant: Democrats are considerably more likely to support buyouts than either Republicans or Independents (the omitted reference category). Age is negative and statistically significant: on average, older Americans are less supportive of buyouts and amnesties than younger ones, which could reflect more conservative values, or greater wariness of compensation following layoffs as moving jobs

²⁶Respondents recorded approval on a 0-10 scale. We drop neutral responses, code all responses strictly above 5 as approval, and all responses strictly below 5 as disapproval.

becomes more difficult. Women also appear to be less supportive of buyouts than men, although the gender gap is not always statistically significant across the three vignettes.

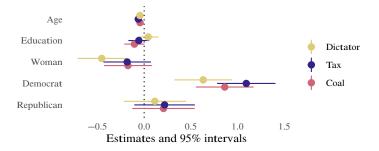


Figure 4: Socio-demographic characteristics and support for buyout and amnesty plans.

To estimate the causal effect of policy design (i.e., the identity of buyout beneficiaries), we estimate linear regression models with the randomized vignette features as regressors. Figure 5 shows the coefficient estimates produced by three models of this form:

Support =
$$\beta_0 + \beta_1$$
Workers+ (1)
 β_2 Moral hazard+
 β_3 Government intervention + ε ,

where the Support outcome is measured on a 0 to 10 scale; Workers is equal to 1 if the proposed policy compensates workers and 0 if it compensates the industry; Moral hazard and Government intervention are binary variables equal to 1 if the respondent is assigned to the corresponding treatment group; and the omitted category is the Control group. In the Amnesty experiment, Government intervention is replaced by Ethical principle.

The first important result is that the design of a buyout program matters a great deal for public support. On average, when compensation targets coal workers, the level of public support for the buyout program is about 0.7 points higher (about 1/4th of a standard deviation on the outcome scale). Considering that the treatment, which consists of substituting a single term in the vignette, is relatively weak, we interpret this as a substantively strong effect of program design. The importance of who the direct beneficiaries of a buyout program are is further reinforced by respondents' write-in explanations for their level of support. Among those who received the "industry" treatment, several respondents explicitly noted that they would be more supportive of a buyout scheme aimed directly at workers.

These statistical results are consistent with many of the comments that respondents submitted in our open-ended question. Consider three representative examples: (1) "I don't think the coal industry should be compensated but I do believe all those forced into unemployment by shutting down coal mines should be compensated;" (2) "The residents should be compensated but not the coal industry." (3) "Compensate some worker for up to a year and pay for education to get into another industry, CEO's deserve nothing."

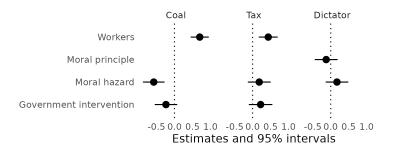


Figure 5: Estimated average treatment effects in the Coal, Tax, and Dictator vignettes.

5.3 Counter-Arguments

The vignettes described above also included a randomized set of counter-arguments, related to moral hazard, excessive government intervention, and ethical principles. This research design allows us to test whether exposure to some counterargument activate individuals' latent concerns more than others.

We find that the randomized counter-arguments have an inconsistent effect on support for buyout programs. The threat of *Moral hazard* reduces support for the Coal buyout, but it has no statistically significant effect on attitudes towards either the Tax buyout, or the Dictator amnesty proposal. Similarly, the Government Intervention treatment has no significant effect on attitudes towards either the Coal buyout or the Tax buyout proposals. With the one exception of moral hazard for Coal buyouts, we thus cannot reject the possibility that respondents are insensitive to the counterarguments as presented to them.²⁷

At first glance, these results suggest that the concerns highlighted by the literature are not the ones that domestic audiences hold highest in mind, and that the main explanation for opposition to buyout schemes lies elsewhere. Another possibility is that the lack of significant treatment effect is precisely because respondents already have these counterarguments high in mind prior to being

 $^{^{27}}$ Adjusting confidence intervals for multiple testing would reinforce this conclusion.

exposed to the treatment. If so, we should not expect to observe a treatment effect.

To distinguish between these two possibilities, we turned to the open-ended explanations written in by respondents. The sum of these answers suggested that in evaluating the case for buyouts, normative concerns loom largest in respondents' minds. In fact, the modal explanation volunteered by respondents for opposing either a Coal or Tax buyout is that the recipients are not deserving of government funds. In many cases, respondents claimed it would be unfair to compensate these groups when so many others receive no compensation when they go out of business. Consider the following three illustrative comments: (1) "There are many jobs that have become obsolete with the advancement of technology. I don't think it is the responsibility of government to compensate." (2) "Absolutely not. We as Americans pay a ton in taxes as it is, we should not be responsible for other company's losing money." (3) "Did anyone compensate those people who sold horses, made carriages or reimburse blacksmiths when gasoline powered vehicles replaced transportation that was powered by animals??"

Drawing on these open-ended answers, we designed a follow-up survey instrument, administered to a new sample of respondents, that provides a list of possible reasons to oppose buyouts. We asked respondents to consider five reasons to reject buyout schemes, even if it meant that welfare gains would not be achieved. Then, we asked respondents to rank these arguments in order of importance:²⁸

Among the five counter-arguments, we offered reasons tapping normative concerns over rewarding "bad actors," concerns over moral hazard, and concerns over government intervention in the economy. We also explicitly allowed for the belief that the industry and the jobs it represents were valuable, and thus deserved government protection. We presented these random order, and we also allowed respondents to write in their own explanation:

- 1. Industries that block beneficial reforms do not deserve compensation from taxpayer dollars.
- 2. Industries that harm society do not deserve compensation from taxpayer dollars.
- 3. Compensating one industry will encourage other industries to block beneficial reforms in the future.
- 4. By making large payments to industries, the government is interfering too much with the economy.
- 5. This industry, and the jobs it represents, deserve government protection.
- 6. Other reason [write-in]

²⁸The order of presentation of counter-arguments was randomized. The vignette describing the buyout plan was nearly identical to the one in our first survey, except that it did not randomize the identity of compensation recipients.

As Figures 6 and 7 shows, the reasons cited against buyouts are highly consistent across the two issue areas. In both cases, the top-most cited reason is one of deservingness: in the case of coal buyouts, it is industries that harm society, and in the case of tax industry buyouts, it is industries that block beneficial reforms, which are said not to deserve compensation. If we sum rankings across both vignettes, the two deservingness concerns come in first and second. Moral hazard comes in second and third, respectively, in the case of coal and tax. If we sum across both vignettes, moral hazard comes in third.

5.4 Moral Reasoning

The written-in comments from our initial survey and the quantitative results from our follow-up survey both indicated that respondents tend to view the case for or against buyouts primarily through a normative lens. Thus, we sought to measure more precisely the degree to which moral considerations were driving attitudes, and distinguish between different moral arguments that were being brought to bear on the question.

To do so, we measured the association between attitudes towards buyouts and two fundamental approaches to moral reasoning. We relied on a standard battery of questions commonly used by moral psychologists (Mata, Vaz and Mendonça, 2022) to rank individuals on a spectrum from consequentialist to deontological moral reasoning (see Appendix).

Figures 8 and 9 illustrate the relationship between baseline support for buyouts of the coal industry and the tax industry, respectively, and our two ideal moral types. As the figures make clear, the relationship is not consistent: if anything, those at either end of the spectrum between deontological and consequentialist reasoning appear to support buyouts of coal more strongly, which may speak to the competing reasons for supporting buyouts. As Table 2 shows, this holds in a linear regression model, where we also control for partisanship and support for the underlying reform. When we subtract each respondent's deontological scores from their consequentialist score, the result is not significant in either direction, for either buyout proposal.

5.5 Credibility

Compensation in buyout schemes is usually paid out over long periods of time, which leads to a time-inconsistency problem: voters and politicians may have incentives to renege on their promise to compensate vested interest groups after the reform is passed. To assess the seriousness of this problem, we designed a follow-up survey to measure the public (dis)approval that democratic

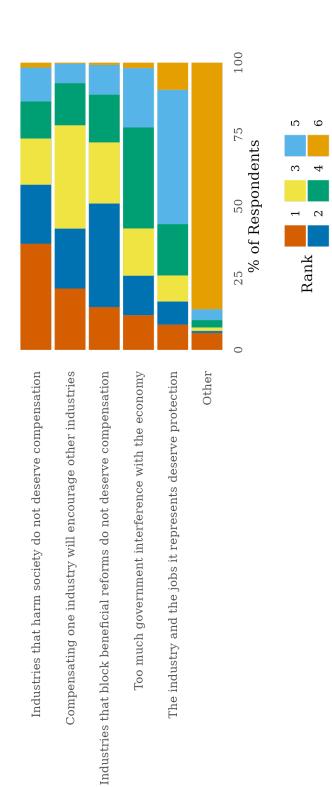


Figure 6: Rank the best reasons to oppose a coal industry buyout

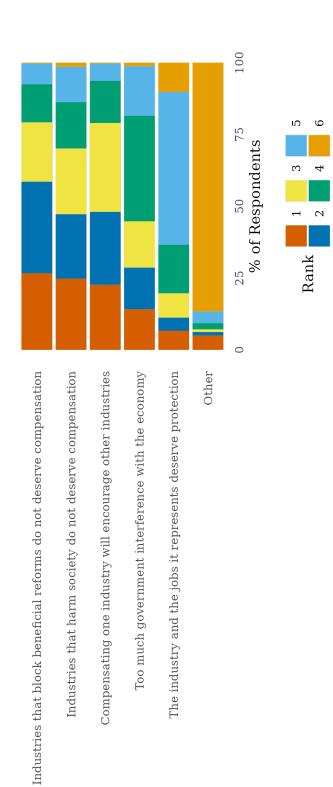


Figure 7: Rank the best reasons to oppose a tax industry buyout

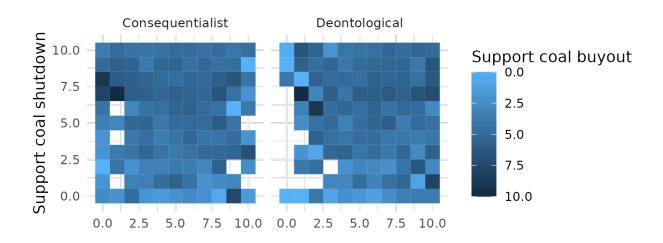


Figure 8: Support for coal buyouts, by level of baseline support and moral dimension.

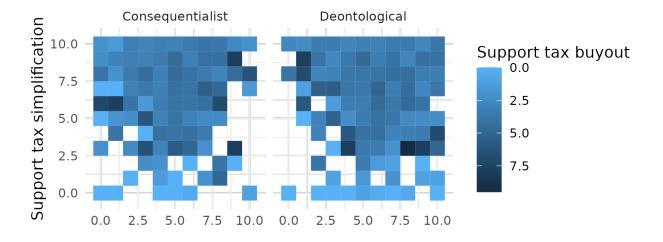


Figure 9: Support for tax buyouts, by level of baseline support and moral dimension.

Table 2: Determinants of support for buyout proposals, controlling for baseline level of support.

	Coal		Tax	
	I	II	III	IV
(Intercept)	2.388***	2.933***	3.426***	2.947***
	(0.316)	(0.296)	(0.479)	(0.448)
Baseline	0.206***	0.200***	-0.033	-0.043
	(0.027)	(0.028)	(0.046)	(0.046)
Consequentialist		0.070		0.168***
		(0.045)		(0.043)
Deontological	0.137**		0.047	
	(0.043)		(0.043)	
Num.Obs.	1999	1999	1999	1999
R2	0.051	0.046	0.001	0.012
R2 Adj.	0.050	0.045	0.0002	0.011
AIC	10520.3	10532.4	10716.4	10695.8
BIC	10542.7	10554.8	10738.8	10718.2
Log.Lik.	-5256.132	-5262.212	-5354.208	-5343.882
F	35.343	27.893	0.851	7.765
RMSE	3.14	3.14	3.26	3.24

⁺ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

leaders would face if they broke their commitments to an industry following a buyout. Specifically, we asked all respondents the following vignete and question:

Imagine that a deal has been reached: The coal industry agrees to shut down all coal-fired power plants, in exchange for a large payment spread over 5 years. Public health improves.

But after 2 years, a new government is elected and decides to stop the payments: it claims that the coal industry does not deserve any further compensation.

Given that the aim of the reform has been achieved, and that public health has improved, would you approve or disapprove of the new government breaking its initial commitment and stopping payments to the coal industry?

The results are striking. Nearly half of respondents favor reneging on compensation under both proposals, counting responses higher than 5 on the 0-10 scale. This amounts to a proportion of 43% for coal, and exactly 50% for tax.²⁹ If we add those who were neither in favor nor opposed, we see that a majority would not be opposed to breaking the commitment under either the coal or the tax industry buyout.

 $^{^{29}}$ When comparing those strictly in favor (>5) to those strictly against (<5).

Table 3: Determinants of support for reneging on a buyout promise, controling for partisan identification

	Coal		Tax	
	I	II	III	IV
(Intercept)	3.971***	2.937***	5.700***	4.449***
	(0.391)	(0.379)	(0.506)	(0.502)
Deontological	-0.104*		-0.130**	
	(0.045)		(0.047)	
Independent	0.0007	0.001	0.092	0.102
	(0.255)	(0.257)	(0.248)	(0.251)
Republican	-0.046	-0.084	0.103	0.084
	(0.217)	(0.218)	(0.198)	(0.197)
Baseline	0.156***	0.148***	-0.006	-0.017
	(0.035)	(0.035)	(0.047)	(0.048)
Consequentialist		0.088 +		0.106*
		(0.047)		(0.049)
Num.Obs.	1999	1999	1999	1999
R2	0.029	0.028	0.006	0.004
R2 Adj.	0.027	0.026	0.004	0.002
AIC	10699.5	10702.0	10871.1	10875.3
BIC	10733.1	10735.6	10904.7	10908.9
Log.Lik.	-5343.769	-5344.977	-5429.570	-5431.648
F	9.000	8.116	1.950	1.264
RMSE	3.24	3.24	3.35	3.35

⁺ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

The results from Table 3 offer a closer look at what lies behind these attitudes. Tellingly, those in favor of phasing out coal are also more likely to favor reneging on compensation. We see the same positive relationship for reneging on tax industry buyouts, but here the effect falls short of statistical significance. Republicans are less prone to reneging than Democrats, though the relationship is not statistically significant. And while the deontological-consequentialist spectrum of moral reasoning did not matter much for approval of buyouts in Table 2, here it becomes clear that those more prone to deontological (consequentialist) reasoning are significantly less (more) likely to favor reneging.

In sum, the fears often cited by targets of compensation schemes over potential policy reversals seem to find support in the data: once the reform is achieved, individuals are not opposed to breaking promises made in the course of buying out interest groups. And those more in favor of the reform are also most in favor of subsequently cutting off compensation.

6 Conclusion

Small concentrated interests that dominate larger, more diffuse interests are the bogeyman of political economy. Distributional effects, combined with unequal mobilization between the winners and losers of reforms, is the most common explanation for why socially beneficial proposals fail to pass. Yet a welfare-enhancing reform implies the possibility of compensating the negatively affected parties in a way that renders them whole, while still leaving everyone else better off. Kaldor first presented this argument in 1939, but deliberately steered clear of making claims about when such compensation would be advisable. We pick up where Kaldor left off, by delving into the politics of the question. This article offers a first look at the determinants of democratic support for public buyouts.

We review past examples across different policy domains, from agricultural reform to phaseouts of coal energy, and outline a theory of buyouts that lists some of the considerations in favor or against buyouts in specific contexts. Among these, we highlight the importance of moral hazard, non-material considerations over the "deservingness" of compensation recipients, and concerns over excessive government intervention.

We then test these expectations against survey data, by assessing attitudes towards buyouts using three surveys amounting to a total sample of 6000 American respondents, looking at two main issue-areas: coal power phase-outs, and tax filing simplification, both of which have long been blocked by vested interest groups. To further home in on the mechanism, we also consider

respondents' views to an analogous proposal that abstracts away from economic considerations: an offer of asylum to a foreign dictator to quell a civil conflict. In each case, we ask whether domestic audiences are favorable to the proposal, and what these attitudes depend on. Finally, we test how open individuals are to suspending compensation once the reform has been achieved, as a means of getting at often-cited fears over policy reversal on the part of buyout recipients.

The findings offer a number of important takeaways. Buyouts enjoy considerable support among respondents, and this support is highly correlated across different settings, from coal phase-out and tax reform to asylum for dictators. Yet the level of support is driven both by partisanship and the program's recipients: buyouts aimed at individual workers find significantly more favor than those aimed at the companies that employ them. And while buyouts are envisioned among economists as means of securing welfare-enhancing reforms, respondents appear to view them primarily through a normative lens. Buyouts recipients are thought to either deserve compensation or not, and these normative considerations dominate concerns over issues like moral hazard. Finally, potential targets of buyout proposals may have good reason to fear policy reversals: a majority of respondents are not opposed to rescinding compensation to the targets of buyouts as soon as the reform is passed. Those who favor the reform, moreover, are more likely to favor suspending compensation once reform is achieved.

Taken together, these findings suggest that buyouts may provide tenable solutions to enduring policy stalemates. Yet the viability of buyouts is conditional on policy design: a successful buyout scheme would focus on the individual workers who stand to lose from reform, rather than the firms that employ them. It would highlight the legitimate expectations these workers held when they first entered their industry, by way of speaking to their "deservingness". To gain the buy-in of buyout recipients, in turn, compensation could be structured with larger payments up-front, as a way of rendering the commitment to compensation more credible. Use of other hand-tying mechanisms, like international treaties, may be another means of quelling fears of policy reversal.

In taking a first step towards assessing the political viability of buyout schemes, this article also leaves much room for future research. As the discussions of past buyouts in coal and agriculture suggest, some countries (like Canada and Australia) appear more inclined to implementing public buyouts than others (like the US). Studying national differences in public attitudes, political institutions, and industrial organization, may serve to explain such cross-sectoral variation. Future work should also look more closely at how program design affects buy-in. In this respect, the structure of compensation, and the bargaining framework with the relevant interest groups

are key considerations. Additional questions also remain over the normative aspects of buyouts. In our discussion, we limit the case for buyouts to instances where compensation is necessary to pass reforms. Yet there is a broader normative case for extending compensation even to cases where reform would be politically achievable without it. This is implicit in Hicks' comment from 1939, when he argued that failure to compensate those on the losing side of welfare-enhancing reforms has given "all sound policy a bad name"—a view reinforced by the recent populist backlash against globalization across industrialized countries. In this telling, feedback effects following uncompensated reforms might be seen as a delayed form of mobilization which nonetheless reduces the effectiveness of these reforms.

One effect of including buyouts in policymakers' menu of options may be to highlight the adjustment costs of welfare-enhancing reforms, and incentivize them to provide a better sense of the benefits that would outweigh these adjustment costs. In this way, the viability of a buyout can be thought of as useful test for the desirability of reform. Stated otherwise, one condition for Pareto improvements is that there be some amount of compensation that the winners of a reform are willing to offer for the reform to go through, and that those on the losing side are willing to accept.

Another implication of our discussion is to highlight the considerable costs to society that come from vested interest groups blocking welfare-enhancing reforms. While the focus of policy-making is traditionally on producing novel policy ideas, a more fruitful direction might be to work towards bringing existing policy ideas into being. We show that buyouts may be one democratically compatible means of doing so.

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7 Appendix

7.1 Survey Administration

To measure the level and determinants of support for buyout programs, we conducted three online surveys, each with a sample of 2000 American adults, which we recruited to meet population quotas by age, gender, Census region, and education, covering a total of 6000 respondents.

The first survey, which sought to get at overall approval rates for buyouts, was conducted between May 31st and June 4th 2021 by the survey firm Dynata. A second follow-up survey sought to address a corollary question, and was fielded through the same firm between August 9th and 20th (see Section 7.4). A third survey focused on the underlying reasoning behind rates of approval for buyouts, and was fielded through the survey firm Prolific between August 29th and Sept 1st 2022. In all cases, respondents who failed an attention check were excluded from the survey.

7.2 Does learning about the possibility of a buyout affect people's approval of the underlying reform?

In a follow-up to our first study, we asked whether being asked to consider the proposal of buying out the coal industry might have an effect on individuals' approval for the underlying reform—that is, phasing out coal energy. Buyouts are an unfamiliar policy idea to most respondents, and they bring into stark relief the social cost from blocked reforms. Is this enough to change people's minds about the need for reform in the first place?

To get at this possibility, we randomized the stage at which respondents were asked about their approval for the reform. All respondents were offered the same contextual information about the social costs of coal production, and lobbying by the coal industry. Then, half of survey respondents were randomly assigned to the *Early buyout mention* treatment condition, in which we mentioned the buyout proposal plan, and its costs and benefits, as in the first experiment, above. The *Late buyout mention* group saw no mention of buyouts at first. All respondents were then asked their views about the desirability of phasing out coal. This allowed us to test whether exposing respondents to the very concept of a buyout, and its Pareto-improving quality, might affect their views about social costs of coal, and make them think more favorably about phasing out coal through any means necessary.

In the same study, and following some of the written-in explanations respondents offered in Study 1, we added two questions about government redistribution, since many respondents appeared to view buyouts in terms of redistribution of income, rather than as a means of securing beneficial reforms. First, we used a standard question to elicit respondents' support for income redistribution. Secondly, we asked a random subset of respondents whether they had received a Covid relief check during the pandemic. In each case, the aim is to test whether attitudes

towards redistribution drive beliefs about buyouts. If so, then we would expect that controlling for demographic traits and political partisanship, those more in favor of redistribution, or those who were reminded of having benefited from government support during the pandemic, would also be more in favor of buyout proposals.

7.3 Are Buyouts a Means of Reform or Redistribution?

We are interested in whether buyouts are perceived as policy instruments aimed at passing welfareenhancing reforms, or as redistributive programs. That is, do domestic audiences interpret buyouts through the means used, or the end sought?

All aforementioned proposals for buyout schemes in agriculture (e.g. the Boschwitz-Boren proposal in 1985), trade (e.g. the proposals floated during the debates over the British Corn Laws), and coal-fuelled power (e.g. Friend and Cramer's "deal of the century" to buy out the US coal industry) view compensation of the affected parties as a means of securing welfare improvements. Similarly, the primary intent of buying out the ship building industry in exchange of repealing the Jones Act would be to attain the resulting efficiency, rather than transferring tax revenue to a declining US industry—even as doing so might have merit on grounds of fairness or equity. In the same way, a buyout of a chemical industry group in exchange of classifying a chemical product as a carcinogen would be directed at the resulting health benefits, rather than at propping up the chemical industry at issue. More plainly still, drawing on the additional vignette we use in Study 1, offering amnesty to dictators is intended to quell a civil conflict, rather than allowing brutal political leaders a comfortable retirement. In other words, the compensation in most buyout schemes would not be offered if there were a means of passing the underlying welfare-enhancing reform without it. In this understanding, buyouts are defined by their end (welfare improvement), rather than their means (compensation).

Yet the written-in comments to our first survey, which we detail below, offer reason to believe that large government transfers, no matter their professed intent or effective outcome, are often viewed on the basis of moral desert, whereby voters evaluate whether the recipients "deserve" compensation. In other words, buyouts may be viewed primarily through the lens of redistribution. This matters, insofar as individual attitudes on redistribution vs. efficiency tend to align with ideological positions along a left-right political spectrum. So which view dominates when it comes to buyouts?

We get at this question in two different ways. First, we test whether rates of approval for buy-

³⁰Addressing the issue on normative grounds raises a number of other considerations. Among these, one might ask what expectations an interest group had at the outset, and how they came to be "vested with their interests" in the first place. Investment law takes a similar approach when it asks whether an investor's "legitimate expectations" have been breached. This line of argument has been frequently pursued in the last decade under the fair and equitable treatment (FET) standard. See Potestà (2013).

outs correlate with support for a broadly formulated question about government redistribution.³¹ Secondly, we ask a random selection of our respondents whether they received a "Covid-19 check" during the pandemic. The mention of Covid checks is meant to prime respondents to think about redistribution; those that received it may grow more open to redistribution, while those that did not may become less open. We thus compare the rate of approval of buyouts among respondents who received a check and those who did not with the control group that was not primed with the Covid-19 check question.

Buyouts are designed to achieve welfare-enhancing reforms, yet any large compensation package may instead be seen as a means of redistribution. Since views about redistribution are highly polarized, we take a closer look at how much attitudes towards redistribution are driving beliefs about buyouts.

First, and most simply, we asked all respondents whether they favored fiscal redistribution, using the following standard question, with responses on a scale from 0 to 10:

How much do you agree or disagree with the following statement? Government should try to reduce the differences in income between people with high incomes and those with low incomes.

The bivariate correlation alone (0.51) suggests the high relation between elicited views about redistribution and approval for the coal buyout. This association is statistically significant in a regression, the estimates of which are shown in Figure 10, and remains unaffected by the inclusion of a "Democrat" indicator variable of political ideology. In fact, the association between political ideology shown in the descriptives above seems largely driven by views on redistribution, insofar as it has no significant effect when included simultaneously in the model.

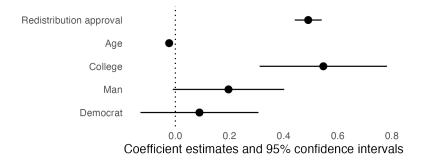


Figure 10: Approval for fiscal redistribution and support for coal buyout

Secondly, before eliciting their views about buyouts, a random subset of our respondents were asked whether they received a Covid-19 stimulus check from the government at any point during the pandemic. The question reads:

³¹Following the formulation of similar redistribution questions in nationally representative surveys, we ask respondents: How much do you agree or disagree with the following statement? Government should try to reduce the differences in income between people with high incomes and those with low incomes.

The US government sent checks to millions of Americans who lost income during the Covid pandemic. Did you personally receive any Covid relief funds during the pandemic?

Looking at the results, 71% of respondents who were presented with the Covid question indicated that they received a Covid stimulus check; 29% said they had not. In the ideal experimental setting, we would randomize whether someone received government stimulus. Given the impracticality of doing this, our random priming of respondents to think about whether they received relief funds is a weaker treatment, and a necessarily second-best approach. It also means we cannot rule out the possibility of bias. In particular, those who oppose government intervention may be less likely to declare that they have received a relief payment. Nevertheless, the findings remain telling of the association between views on redistribution and views on buyouts.

Figure 11 shows the estimates in a regression setting, where estimates of recipients vs. non-recipients of Covid-19 government relief are shown, with the control group the omitted category, and controls for the same demographic variables as above. These results indicate that respondents primed to think about how they benefited from government relief became more likely to approve a coal buyout; but the much stronger effect was in the opposite direction: respondents primed to think about how they did *not* receive a Covid check became markedly *less* favorable to a coal buyout. The effect in substantive terms is akin to the shift in attitudes associated with going from a Democrat to a non-Democrat.

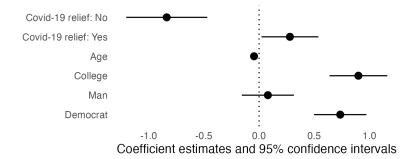


Figure 11: Covid relief recipients and support for coal buyout

Taken together, these disparate pieces of evidence suggest that respondents view buyout schemes through the lens of fiscal redistribution. Whether it is buyouts of coal workers to phase out coal plants, or buyouts of tax software companies to simplify tax filing, respondents view these primarily as means of propping up those on the losing side of an eventual reform, rather than as the necessary condition for that reform. Accordingly, views about buyouts largely align on preferences over redistribution.

7.4 Do buyout proposals have a mobilizing potential?

Might the mere mention of a buyout option sway public opinion about the underlying reform? Buyouts are an unfamiliar policy proposal to most respondents, and they bring in stark relief the social cost from blocked reforms: by demonstrating how even given a very large money transfer to holdouts, policy reform would still bring benefits, they illustrate the magnitude of the existing efficiency loss. Buyout proposals, by themselves, may thus lead respondents to update their priors about the primary reform in question. If so, such an effect might be a threat to inference, but it would also hold significant policy implications. The updating effect of proposing a buyout might be enough to increase the odds of passing the underlying reform.

To explore this possibility, we conducted a follow-up survey experiment. We offered all respondents the same contextual information about the social costs of coal production, and lobbying by the coal industry. Then, half of survey respondents were randomly assigned to the *Early exposure* treatment condition, in which we mentioned the buyout proposal plan, and its costs and benefits, as in the first experiment, above.³² The *Late exposure* group saw no mention of buyouts at first. All respondents were then asked their views about a forceful coal phase-out:

In general, do you agree that the US government should do everything it can to shut down coalburning energy plants in the coming decade?

If the distribution of answers differs significantly between our treatment conditions, we could conclude that the mere fact of introducing a proposal for a buyout—with all that it implies about the social cost of stalled reform, and the unlikelihood of passing this reform without first addressing the associated political economic standoff—might itself affect public opinion. In other words, information about interests groups successfully mobilizing against beneficial change over an extended period might make the individual citizen value change more highly. Figure 12 shows that, for better or worse, this does does not appear to be the case: the distribution of views for each treatment group appears highly similar, with the *Early exposure* group slightly more favorable to the reform. A regression approach suggests the same: the mere mention of a buyout, and querying respondents about their views on it, does have a positive effect on individual attitudes towards the underlying reform, but it falls short of statistical significance (p=0.16).

7.5 Deontological vs. Consequentialist Scales

To measure respondents deontological and consequentialist orientations, we ask a series of 8 questions on a 0 to 10 scale from "Completely Disagree" to "Completely Agree." Deontological:

- It is never justified to cause harm or suffering to anyone.
- Some rules should never be broken, even if breaking them allows for a greater good.

³²The text reads: Some people say that because of how powerful the coal industry is, the only way to close coalburning energy plants is to compensate the coal industry for its eventual losses. This would cost about \$80 billion dollars now, but it would end up saving Americans money on healthcare.

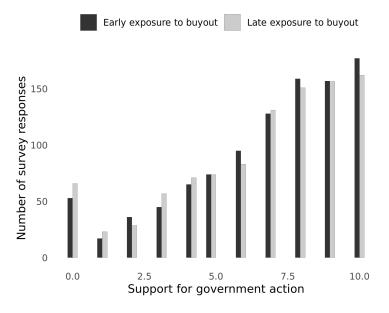


Figure 12: In general, do you agree that the US government should do everything it can to shut down coal-burning energy plants in the coming decade?

- Some principles are universal: they do not depend on circumstances.
- A person's life is sacred, and killing is always wrong.

Consequentialist:

- If causing harm or suffering to a person makes it possible to achieve greater good for a greater number of people, then it is justifiable.
- There are circumstances that justify breaking some rules, especially when breaking them enables achieving a greater good.
- Sometimes the ends justify the means.
- If sacrificing one person means saving many more, then it is permitted.

7.6 Descriptive statistics

Table 4: Estimated average treatment effects in the Coal, Tax, and Dictator vignettes.

	Coal	Tax	Dictator
(Intercept)	5.556	4.605	4.899
` - ',	(0.129)	(0.135)	(0.116)
Government intervention	-0.237	0.223	
	(0.160)	(0.167)	
Moral hazard	-0.577	0.185	0.174
	(0.154)	(0.162)	(0.161)
Workers	0.704	0.436	
	(0.128)	(0.135)	
Moral principle			-0.126
			(0.162)
Num.Obs.	2001	2001	2001
R2	0.021	0.006	0.002
R2 Adj.	0.020	0.005	0.0008
AIC	9905.3	10096.3	9990.2
BIC	9933.3	10124.3	10012.6
Log.Lik.	-4947.671	-5043.141	-4991.117
F	14.682	4.196	1.807
RMSE	2.87	3.01	2.93
Std.Errors	HC1	HC1	HC1

Table 5: Descriptive statistics for continous variables collected in the May 2021 survey.

	Unique (#)	Missing (%)	Mean	SD	Min	Median	Max
Age	72	0	46.7	18.0	18.0	46.0	91.0
Income	12	1	5.1	2.3	0.0	5.0	10.0
Tax: Support	11	0	5.0	3.0	0.0	5.0	10.0
Coal: Support	11	0	5.6	2.9	0.0	6.0	10.0
Dictator: Support	11	0	4.9	2.9	0.0	5.0	10.0

Table 6: Descriptive statistics for categorical variables collected in the May 2021 survey.

		N	%
Gender	Man	968	48.4
	Other	6	0.3
	Woman	1027	51.3
Education	No formal education	10	0.5
	Some primary school	23	1.1
	Primary school completed	60	3.0
	Some secondary/high school	158	7.9
	Secondary/high school completed	709	35.4
	Some college or university	382	19.1
	University completed or higher	659	32.9
Party ID	Democrat	763	38.1
	Independent	516	25.8
	Republican	591	29.5
Tax: Argument	Control	668	33.4
	Government intervention	667	33.3
	Moral hazard	666	33.3
Tax: Recipient	Corporations	1002	50.1
	Workers	999	49.9
Coal: Argument	Control	673	33.6
	Government intervention	663	33.1
	Moral hazard	665	33.2
Coal: Recipient	Corporations	997	49.8
	Workers	1004	50.2
Dictator: Argument	Control	664	33.2
	Moral hazard	668	33.4
	Moral principle	669	33.4

Table 7: Descriptive statistics for continous variables collected in the August 2021 survey on coal buyouts.

	Unique (#)	Missing (%)	Mean	SD	Min	Median	Max
Support: "buyout"	11	0	6.4	2.8	0.0	7.0	10.0
Support: "do everything"	11	0	6.6	2.9	0.0	7.0	10.0

Table 8: Descriptive statistics for categorical variables collected in the August 2021 survey on coal buyouts.

		N	%
Buyout plan	Gradual	1004	50.0
	Immediate	1006	50.0
Covid check	No	278	13.8
	Yes	725	36.1
	NA	1007	50.1
Education	No formal education	5	0.2
	Some primary school	28	1.4
	Primary school completed	44	2.2
	Some secondary/high school	110	5.5
	Secondary/high school completed	413	20.5
	Some college or university	710	35.3
	University completed or higher	700	34.8
Gender	Female	1040	51.7
	Male	967	48.1
	Other	3	0.1
Income	Less than USD 24,900	267	13.3
	From USD $25,000$ to USD $34,900$	234	11.6
	From USD $35,000$ to USD $49,999$	254	12.6
	From USD 50,000 to USD 74,999	301	15.0
	From USD 75,000 to USD 99,999	275	13.7
	From USD 100,000 to USD 149,999	273	13.6
	From USD 150,000 to USD 200,000	303	15.1
	Over USD 200,000	103	5.1
Party ID	Democrat	792	39.4
	Independent	399	19.9
	Republican	728	36.2

7.7 Conformity with pre-registration

The following tables and figures were not pre-registered and should thus be treated as exploratory:

- Table 1: Correlations between individual-level support for buyouts across three policy domains.
- Figure 4: The association between socio-demographic characteristics and support for buyout and amnesty plans.
- Figures 6 and 7: Support for coal and tax buyouts, by level of baseline support and moral dimension.
- Table 3: Determinants of support for reneging on a buyout promise, controling for partisan identification.

The following analyses were pre-registered but are not reported in the main text. They are reported in appendix and the results contained therein do not affect our substantive conclusions.

- Table 11 shows the level of support for buyouts by partisan identification.
- The estimates in Table 10 are entirely consistent with Figure 5: Estimated average treatment effects in the Coal, Tax, and Dictator vignettes. Omitted from the presentation: interactions between the treatment indicators and socio-demographic variables (following Lin 2013): education, income, gender, and partisan identification. The quantities reported are average contrasts. Robust standard errors.

Minor departure from pre-registration:

• For simplicity, Table 2 in the text does not include socio-demographic controls. As Table 9 shows, these controls do not make a meaningful change in the substantive results.

Table 9: Determinants of support for buyout proposals, controling for baseline level of support and demographic controls.

	Co	oal	Ta	ax
	I	II	III	IV
(Intercept)	3.342***	4.234***	4.478***	4.943***
	(0.390)	(0.395)	(0.520)	(0.512)
Baseline	0.180***	0.179***	-0.007	-0.012
	(0.028)	(0.028)	(0.042)	(0.042)
Consequentialist		0.044		0.089*
		(0.046)		(0.043)
Deontological	0.190***		0.154***	
	(0.044)		(0.041)	
Num.Obs.	1999	1999	1999	1999
R2	0.086	0.073	0.117	0.111
R2 Adj.	0.081	0.068	0.112	0.106
AIC	10462.1	10491.0	10487.1	10500.3
BIC	10529.4	10558.2	10554.3	10567.5
Log.Lik.	-5219.073	-5233.488	-5231.539	-5238.158
F	14.449	11.329	20.267	18.010
RMSE	3.08	3.10	3.07	3.08

⁺ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Table 10: Estimated average treatment effects in the Coal, Tax, and Dictator vignettes. Omitted from the presentation: interactions between the treatment indicators and socio-demographic variables (following Lin 2013): education, income, gender, and partisan identification. The quantities reported are average contrasts. Robust standard errors.

		Coal	Tax	Dictator
Counter	Moral hazard - Control	-0.631***	0.157	0.216
	Moral hazard - Control	(0.155)	(0.163)	(0.162)
	Government intervention - Control	-0.362*	0.195	
	Government intervention - Control	(0.160)	(0.166)	
	Moral principle - Control			-0.167
	Moral principle - Control			(0.162)
Target	Workers - Corporations	0.638***	0.341*	
	Workers - Corporations	(0.130)	(0.134)	
Num.Obs.		1857	1857	1857
R2		0.090	0.112	0.089
R2 Adj.		0.079	0.100	0.081
AIC		9089.6	9227.4	9144.1
BIC		9227.8	9365.6	9249.1
Log.Lik.		-4519.795	-4588.711	-4553.068
F		7.901	10.011	10.628
RMSE		2.76	2.86	2.81
Std.Errors		HC1	HC1	HC1

⁺ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Table 11: Republicans are less likely to support coal shutdown than Democrats. Democrats and Republicans support tax simplification in about equal measure.

	Democrat		Indepe	ndent	dent Repub			
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Coal shutdown	8.01	2.16	6.45	2.89	4.29	3.23	6.85	3.02
Tax simplification	8.79	1.74	8.62	1.71	8.39	2.19	8.66	1.87