Policy Making for the Long Term in Advanced Democracies

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Abstract

A range of policy problems—from climate change to pension sustainability to skill shortages—confront governments with intertemporal dilemmas: trade-offs between maximizing social welfare in the present and taking care of the future. There is, moreover, substantial variation in the degree to which democratic governments are willing to invest in long-term social goods. Surprisingly, the literature on the politics of public policy has paid little explicit attention to timing as a dimension of policy choice, focusing almost exclusively on matters of cross-sectional distribution. This article develops a framework for explaining intertemporal policy choices in democracies by adapting findings from the literatures on distributive politics, political economy, and political behavior. The article makes a case for analyzing the politics of the long term as a struggle over how welfare should be allocated across groups and over how policy effects should be distributed through time.

INTRODUCTION

From climate change and aging populations to crumbling infrastructure, skill shortages, and public debt, many of the most important social problems facing advanced industrialized societies share a common temporal structure. Addressing these challenges requires taking costly action in the present, while the benefits of such action will be slow to arrive, fully emerging only years or decades hence. On such issues, governments often face stark intertemporal trade-offs between maximizing social welfare in the present and investing in the future. For democratic governments in particular, this social dilemma also presents a thorny political problem, particularly if the benefits of costly policies will not emerge until after the next election.

How do governments in democratic contexts manage trade-offs between the short and the long run in their policy choices? Under what conditions are elected politicians willing to invest in the long term at short-term cost? We have surprisingly few clear answers to these questions. Although there has been significant scholarly attention to policy making on issues with long-term implications, the temporal dimension of policy choice has not itself been a major object of theoretical or empirical analysis. Students of the politics of policy making have principally examined policy choice as a distributive decision about who gets what, rather than an intertemporal decision about when they get it.

The aim of this article is to identify promising lines of analysis in the study of intertemporal policy choice in advanced democracies. As I intend to demonstrate, we can develop a range of plausible and testable propositions about the politics of the long term by drawing on and adapting insights from literatures focused on other questions. Although we do not yet know a great deal about intertemporal politics, we know a tremendous amount about the institutional, organizational, and psychological inputs into the politics of policy making. For reasons to be examined, we cannot simply import arguments about the politics of "who gets what" into our accounts of the politics of "when." Yet understanding the politics of long-term investment requires grappling with issues familiar to students of the political economy of distribution—including the processes through which voters hold incumbents accountable for policy consequences, the challenges of nonsimultaneous political exchange, and the difficulty of imposing losses on well-organized interests. We can develop a rich set of theoretical expectations about intertemporal policy making by thinking through the implications of arguments about the politics of distribution for the rather different problem of choice over time.

The article proceeds as follows. After conceptualizing intertemporal policy trade-offs, I survey the limited role that timing, as a dimension of policy choice, has played in analyses of the politics of policy making. The next two sections build on, and take steps beyond, findings in the political behavior, public policy, and political economy literatures to advance a broad analytic approach to the politics of the long term. I conclude with a call for scholars to analyze policy choice in two dimensions, as a decision about both who gets what and when they will get it.

CONCEPTUALIZING POLICY MAKING FOR THE LONG TERM

Of central interest to this article are policies that make welfare trade-offs at the expense of the present and in favor of the future. To conceptualize such policies more precisely, let us consider a class of choice situations in which governments face a trade-off between the temporal proximity of a policy's net social benefits and the long-term size of those benefits. This type of intertemporal dilemma is depicted, in three variants, in **Figure 1**. In each situation, policy makers choose between a policy A that delivers smaller but quicker net social gains and a policy B that delivers a greater long-run stream of net gains, but more slowly. In **Figure 1*a***, policy makers are deciding whether to invest in enhancements to the status quo: Policy A might be a current education policy that yields constant skill outcomes over time, whereas policy B would raise taxes in the near term to boost skills and eventually deliver a long-run stream of economic benefits that exceed its short-run costs. **Figure 1*b*** depicts a choice between immediate and deferred enjoyment of a resource windfall: Policy A might be a decision to use a current budget surplus to deliver immediate tax cuts, whereas policy B might use that same surplus to invest in scientific and medical research that will deliver greater welfare gains over the long run. In **Figure 1*c***, we see a choice between accepting smaller losses in the present or greater losses over the long run: Policy A might be a decision to forego investment in crumbling transportation infrastructure, whereas policy B might raise taxes to maintain the quality of roads, railways, and bridges over the long term.

In each variant, policies of type B—which I term policy investments (Jacobs 2011)—translate a given amount of short-run welfare into greater long-run welfare. There is, in fact, broad empirical evidence that policy makers regularly confront opportunities to invest current resources in ways that generate large long-run net social benefits. Studies of the social impacts of educational investments (Lochner & Moretti 2004, Nores et al. 2005), of the consequences of fishing restrictions for long-run fishery stocks (Sumaila & Suatoni 2005), of the economic value of investments in disaster preparedness (Healy & Malhotra 2009), of the health and financial benefits of antismoking campaigns (Fishman et al. 2005, Rivara et al. 2004), and of the long-run economic benefits of carbon taxes (Mityakov & Rühl 2009, Nordhaus 2008)—to consider but a few policy domains—point to large, positive long-run returns (after applying common social discount rates) for societies willing to pay costs in the present. The choice between policies of type B and those of type A is virtually ever present.

Policies may, of course, have both intertemporal and cross-sectional distributive consequences. **Figure 2** separates these two dimensions of long-range policy impact. Policies lying along the y-axis, such as Option 1, are what we might call vertical policy investments: Such measures shift aggregate consumption opportunities from the present to the future without disturbing the distribution of resources across segments of society. Policies lying directly on the x-axis, such as Options 2 or 3, are forms of long-run redistribution, reallocating resources cross-sectionally without expanding aggregate welfare: Consider, for instance, a long-run cutback in state pension benefits. Finally, Options 4 and 5 are policies that act along both dimensions, expanding society's long-run resource base while also redistributing shares of those resources cross-sectionally: for example, the imposition of costs on carbon-intensive sectors of the economy to invest in diffuse environmental benefits (Metcalf & Weisbach 2009).

This article's focus is on the intertemporal dimension of policy making for the long term. Nonetheless, as explored below, the politics of distribution looms large in intertemporal policy choice, both because policy investments may have distributional features that shape their politics, and because political actors often face a choice between intertemporal and redistributive responses to long-run policy problems.

TIMING: AN OVERLOOKED DIMENSION OF POLICY CHOICE

Time and timing play an important role in much political analysis. They feature, for instance, in temporally structured historical accounts of path-dependent processes (e.g., Mahoney 2000, Pierson 2004) and in political economy literatures on delegation and nonsimultaneous exchange (e.g., McNollgast 1999, North & Weingast 1989). What political scientists have paid less attention to, however, is how governments make *choices* about the timing of policy consequences: how they trade off between the short term and the long term.

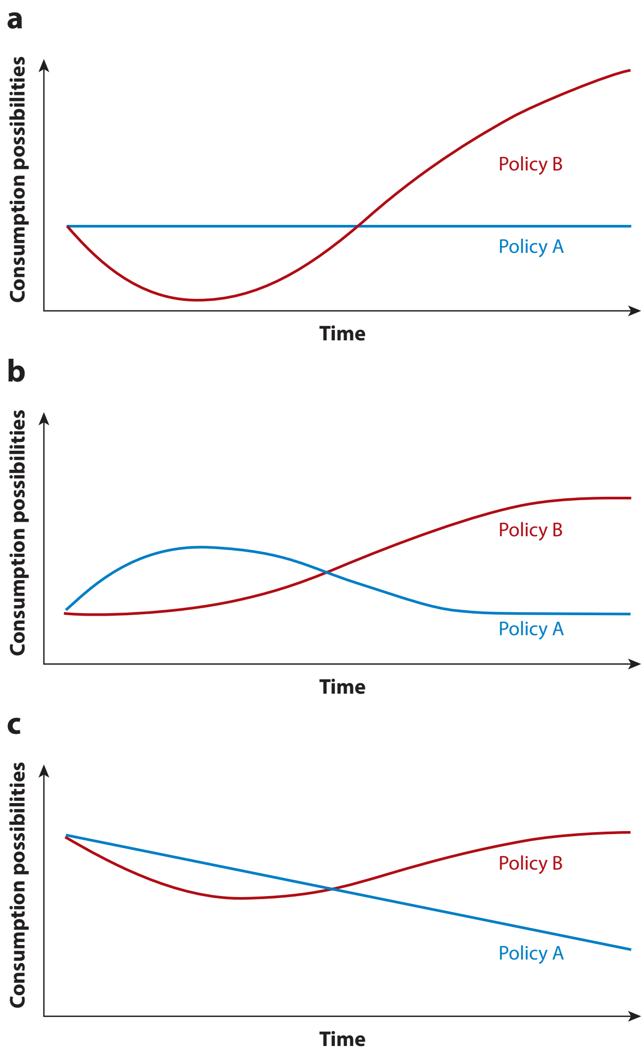

Figure 1

Three forms of intertemporal policy dilemma. In each variant, policy makers face a choice between policy A, which delivers smaller but quicker net social gains, and policy B, which delivers a greater stream of net social gains over the long term. (*a*) Policy makers choose either to maintain the status quo level of welfare or to invest in a long-run welfare enhancement. (*b*) The choice is between the immediate consumption of a resource windfall and its investment in a long-term purpose. (*c*) Policy makers accept either quicker but smaller losses or longer-delayed but larger losses.

Most analyses of the politics of policy making do not make analytically meaningful distinctions between policy consequences that will occur shortly after enactment and those that will occur much later. Rather, they typically compare and explain policy choices in light of the volume of social costs and benefits that they generate and the distribution of those effects across groups. A distributive view of policy choice dominates common characterizations of the variation in national welfare-state regimes (e.g., Bonoli 1997, Esping-Andersen 1990) and their development (e.g., Baldwin

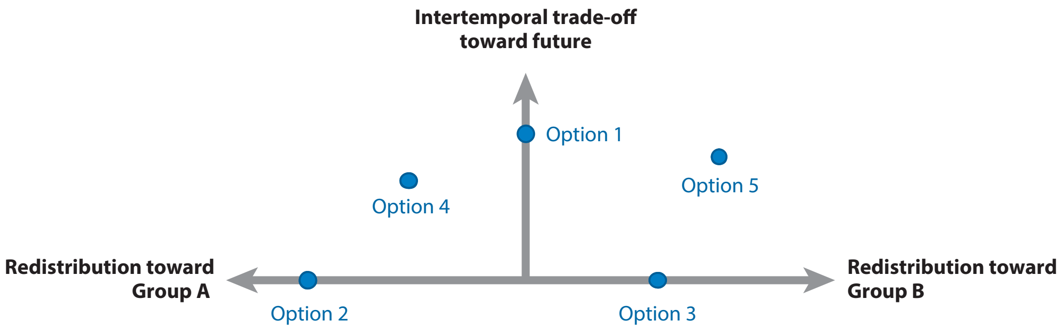

Figure 2

Two dimensions of policy choice. Policy choices vary in both their intertemporal effects and their cross-sectional distributive consequences. Policy Option 1 invests in an expansion of long-run aggregate welfare while leaving unchanged the distribution of resource shares between social groups (labeled A and B). Options 2 and 3 redistribute resources in favor of Group A or in favor of Group B, respectively, without investing. Options 4 and 5 both invest in greater long-run aggregate welfare and alter the relative distribution of welfare between social groups. Adapted from Jacobs (2011).

1990, Korpi 1983, Skocpol 1992). Even when analyzing social programs that involve striking long-term, intertemporal trade-offs for societies and social groups—such as old-age pensions—scholars have grounded their comparisons and explanations in the ways in which these policies distribute benefits and burdens cross-sectionally between producers and retirees, rather than how they allocate consequences over time (e.g., Bonoli 2000, Huber & Stephens 2001, Orloff 1993). The same can be said for the study of the politics of regulation. In the field of environmental politics—where, again, trade-offs between the short and the long term loom large—scholars have rarely explicitly theorized how the timing of social consequences shapes the politics of policy choice (e.g., Harrison 1996, Schreurs 2002, Vogel 1986), even when considering very long-term problems like climate change (Bailey & Rupp 2004, Harrison & Sundstrom 2010, Skolnikoff 1999; for exceptions, see Hovi et al. 2009, Sprinz 2009, Stone 2009). Most studies have been surprisingly silent on the political implications of the fact that the costs of environmental policy action must often be imposed long before its benefits will arrive.

At the same time, a significant strand of scholarship on social and economic policy reform has made an analytical distinction between immediate and longer-term policy outcomes. In general, scholars point to this temporal variation to underline the reduced political import of longer-term effects. In analyses of welfare-state reform, researchers have argued, for instance, that politicians can avoid blame for the pain of program retrenchment by delaying cutbacks in time (Huber & Stephens 2001, Pierson 1994, Weaver 2003). A similar line of argument is central to literatures on political business cycles (e.g., Hibbs 1977, Nordhaus 1975, Rogoff 1990) and is sometimes employed in studies of structural economic reforms with short-term costs and long-deferred benefits (Przeworski 1991, Stokes 1996).

Although this last set of analyses treats timing as a relevant dimension of policy choice, they can only get us so far: In particular, they do not point to explanations of *variation* in governments' intertemporal choices. If longer-term policy benefits are generally of low political relevance, it is hard to explain why any democratic government would choose to impose costs today to pursue benefits tomorrow. And yet there is considerable variation in the observed willingness of elected officials to invest in the long run. Consider a few brief examples. Whereas some jurisdictions (e.g., the European Union, California, British Columbia) have imposed costs on constituents by putting a price on carbon,[1] others have done little or nothing to address long-run climate change (Burck et al. 2011). Whereas some democracies (e.g., Sweden, Denmark, the Czech Republic) entered the 2008 financial crisis with levels of public debt well below 60% of GDP, others (e.g., Belgium, France, Portugal) had accumulated much greater liabilities (OECD 2015a).[2] Levels of public investment in education in the OECD range from under 4.3% of GDP in Australia and Italy to over 7% in Denmark and Norway (OECD 2015b). And whereas Japan, Korea, Sweden, Canada, and the United States have accumulated large reserves in their public pension systems, most other OECD countries have not (OECD 2013).

OBSTACLES TO POLICY INVESTMENT IN DEMOCRACIES

How can we explain variation in democratic governments' tendency to invest in the long run at short-run cost? One sensible place to start might be the concept of time preference: the differential weights that an individual places on utilities expected to be enjoyed at different points in time. Might differences in decision makers' time preferences explain variation in their willingness to invest? Possibly so, but this line of analysis faces daunting empirical obstacles. Even under ideal laboratory conditions, measures of time preference display very high instability and are difficult to isolate from confounding influences on intertemporal choice (for a review of the measures and their difficulties, see Frederick et al. 2002). Consistently measuring the discount rates of decision makers across political settings would be an even taller order, and I am not aware of a single study that has sought to do so.

As I seek to demonstrate, we can develop more readily testable propositions by focusing our attention elsewhere. The analysis below is grounded in two behavioral assumptions about citizens and their representatives. Let us first posit politicians and voters who value future outcomes, applying to them only a modest time-preference discount.[3] Let us further assume that politicians seek reelection because it allows them to use policy to promote social outcomes that they value; that is, politicians pursue policy insofar as possible within electoral constraints. As I will demonstrate, this basic setup can generate a rich range of hypotheses about the forces shaping intertemporal policy choice. The first step, however, is to identify clearly the sources of short-termism in democratic politics. Why might a polity led by office holders who value long-run social outcomes, accountable to modestly impatient voters, reject policy investments that could convert a degree of present loss into much greater future gain?

In the remainder of this section, I zero in on three features of policy making for the long term in a democracy that bias choice away from investment: the poverty of information about longer-term outcomes, the fragility of long-run political commitments, and the challenge of imposing investment costs on organized groups. Other analyses of the problem of short-termism, including considerations of additional challenges, can be found in MacKenzie (2016) and Boston & Stuart (2015).

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[1] Albeit a price well below its social costs.

[2] I refer here to general government gross debt. The countries cited here all had similar average GDP growth rates, close to 2% per annum, from 1990 to 2007.

[3] More specifically, the key analytical assumption is that time-preference discount rates are lower than the rates of return to many available policy investments; see Jacobs (2011) for empirical justification of this premise. Drawing on experimental measures and observed aggregate investment behavior, I suggest that average individual time-preference discount rates in advanced industrialized societies are likely below 4% per annum; studies of many available policy investments (like those cited above) indicate returns several times higher. I set aside here the question of whether individuals more steeply discount outcomes expected to occur to future generations rather than to their own; it is not at all clear that they do so (Frederick 2003).

Information About Long-Term Outcomes

Early scholarship on policy myopia centered on a fundamental informational feature of intertemporal politics: the fact that voters have poorer information about future than about present policy consequences. We can think of the problem of informational poverty in two ways. Early work on retrospective economic voting and political business cycles emphasized the simple fact that voters can readily observe past economic performance but have little information about future conditions (Kramer 1971, Nordhaus 1975). Thus, even if voters care about the future, past performance offers a practical shortcut to candidate evaluation and vote choice (Fiorina 1978, Key & Cummings 1966).

A second way of thinking about the problem is cognitive. We know that voters pay modest attention to public affairs and, at best, economize on information and cognitive effort when making political judgments (e.g., Delli Carpini & Keeter 1996, Kuklinski et al. 2000). This well-established finding has especially important consequences for the politics of the long term. Because information about present conditions is typically much more vivid and salient than information about conditions that have not yet emerged, voters are more likely to allocate scarce attentional resources to the former than to the latter (Jacobs 2011). If informational salience is biased toward present outcomes, then incumbents are likely to be judged based on past rather than future conditions.

As Nordhaus (1975) argued in a seminal article on the political business cycle, retrospective electoral behavior creates incentives for governments to make shortsighted policy. For instance, given a trade-off between unemployment today and unemployment tomorrow—and an electorate ignorant of or inattentive to this trade-off—office-seeking politicians will choose myopically, stimulating the economy to minimize preelection unemployment at the cost of postelection inflation and recession (see also, e.g., Hibbs 1977, Rogoff 1990).

The empirical modeling and precise nature of retrospective voting and political business cycles have been topics of vibrant scholarly debate, which need not detain us here.[4] The key point is a general one: To the extent that electorates operate with poorer and less salient information about tomorrow's outcomes than today's, incumbents face incentives to make intertemporal policy choices biased toward the present and to avoid long-run investments with preelection costs. Critically, this problem presents itself even if both voters and their representatives place substantial value on long-term outcomes.

If voters face especially severe informational obstacles to prospective judgment, long-term consequences also present informational problems for policy-making elites. Public officials and political systems in the aggregate can attend to only a small number of policy issues at a time (e.g., Baumgartner et al. 2009, Jones & Baumgartner 2005). Moreover, indicators of past and current social problems and policy performance—feedback from the operation of existing programs or dramatic crises—appear to be especially powerful drivers of official attention (Baumgartner & Jones 2009, Birkland 1998, Kingdon 1984). Problems whose consequences have not yet emerged are less likely to emit attention-generating signals and are thus at a disadvantage in the competition for elite cognitive investment.

Even when attending to long-run issues, moreover, policy makers operate with incomplete information. Although elites possess richer policy knowledge than ordinary voters, they nonetheless confront a forecasting problem over the long run. A vast qualitative literature on decision making within governments highlights uncertainty as a common feature of policy deliberations in general (e.g., Blyth 2002, Hall 1993, Heclo 1974). Yet there are good reasons to expect problems

[4]Reviews of the literature on economic voting include Lewis-Beck & Stegmaier (2000), Anderson (2007), and Healy & Malhotra (2013); see Franzese (2002) for a survey of the political business cycle literature.

of prediction to proliferate over longer time horizons. Policies that pay off over longer periods of time typically hinge on more extended and intricate causal chains. Consider, for instance, the long and complex processes that must unfold to convert current environmental regulation into climate-change mitigation decades from now (Victor 2011). Further, over longer time horizons, the state of the world tends to become less knowable, and key features of social context become more likely to change in ways that may disrupt chains of policy causation (Jacobs 2011). Even if they care about the long run, then, politicians will often have reason to favor a short-run "sure thing" over a risky policy investment.

The Fragility of Political Commitments

The uncertainty of the long term derives not only from the low salience and relatively high causal complexity of long-run policy effects, but also from intrinsic features of democratic politics. Consider a policy that raises current taxes to accumulate a fund to pay future pension benefits. Implicitly, such a policy amounts to a nonsimultaneous exchange between citizens and governing elites. The policy's long-run payoffs will depend critically on whether politicians maintain the initial commitment to deliver the promised benefits. Such commitments may be vulnerable, first, to the well-known problem of time inconsistency (Alesina & Tabellini 1988, Persson & Tabellini 1994): After extracting resources from constituents for a stated long-term goal, politicians may face political incentives to divert those resources toward unrelated purposes. Moreover, even if today's incumbents remain committed to the long-run project, democracy generates turnover in office, and tomorrow's incumbents may have divergent policy preferences and little stake in a bargain to which they were not a party. Over longer time horizons, moreover, both the temptations to renege and the chances of turnover in office multiply.

Citizens have little reason to pay the costs of farsighted policies if they doubt their government's commitment to delivering the benefits. Observational data suggest that citizens' levels of trust in government are an important driver of their willingness to pay taxes for public goods and services (Chanley et al. 2000, Clinch & Dunne 2006, Hetherington 2005, Simonsen & Robbins 2003). Moreover, Jacobs & Matthews (2012, 2015) report survey-experimental evidence that uncertainty about long-run policy commitments can substantially depress support for costly investments in public goods.

Elites, too, may be deterred by political uncertainty. As Moe (1990, p. 124) points out, in a world of insecure "political property rights," today's winning coalition pursues its policy goals in the knowledge that its hold on power is temporary (see also Hicks 2013). Whether politicians are willing to invest in the long run at short-run expense should thus depend on how vulnerable they think their policy initiatives are to the predations of future governments. In my own work on intertemporal choice in the field of pensions (Jacobs 2011), I find that governments' decisions about whether to invest in the accumulation of large pension reserves hinge critically on how likely they think it is that future governments might divert those funds toward unrelated initiatives. Analysts of climate change politics point similarly to massive uncertainty about whether political commitments made today to reduce carbon emissions will be maintained long enough to achieve future environmental benefits (Bernauer 2013, Hovi et al. 2009).

The Opposition of Organized Cost Bearers

A third problem arises when investing in the long run requires imposing costs on well-organized sectors of society. Investments in environmental protection and in the preservation of natural resources, for instance, frequently concentrate their costs on organized industrial sectors and organized segments of the workforce (Harrison 1996). Among the core lessons of the large literature on distributive policy making is the political difficulty of imposing losses on organized interests: Organized groups are both highly attentive to policy consequences that affect them and well positioned to mobilize against policies that cut against their interests (e.g., Arnold 1990, Immergut 1992a, Wilson 1980).

The problem for policy investment is not that interest-group behavior is particularly myopic; to the contrary, organizational leaders are likely to take careful account of policy consequences that might affect their members over the long run. Detailed empirical examinations of interest groups' policy preferences commonly find groups weighing social outcomes over long time horizons (e.g., Campbell & Lynch 2000, King 1993, Martin 2000, Schludi 2005).

The difficulty arises at the intersection of distributive and intertemporal politics. To see the nature of the problem, it is useful to return to the varieties of cross-sectional and intertemporal trade-offs depicted in **Figure 2**. Consider, first, horizontal policy investments, such as Option 4. Horizontal investments are policies—like environmental measures that impose costs on industry—that effect a cross-sectional redistribution of welfare across groups (e.g., from a polluting industry to the general public) even as they generate long-run aggregate gains. If the cost-bearing group (say, the polluting industry) is organized, it will deploy its organizational resources to fight a policy that would represent a long-run distributional loss—not because it is shortsighted, but because it is self-interested.[5] The interest-group politics of horizontal investment should thus in key ways resemble that of pure redistribution.

The problem, however, takes a very different form in the case of policy investments with vertical features (Jacobs 2008, 2011). We can conceptualize vertical policy investments, like Option 1 in **Figure 2**, as those that both impose their short-run costs on and deliver their long-run benefits to the same social group(s). Critically, when policy investment assumes vertical form, the group paying the costs of investment is not necessarily a loser. Indeed, it may enjoy net long-run gains if the investment yields a positive (discounted) rate of return. Thus, organized interests may have good reason to support some vertical policy investments for which they themselves pay the costs. In some contexts, trade unions have been willing to support policies that shift relative tax burdens from capital toward workers to promote private investment and maximize employment and wages over the long run (King 1993, Przeworski & Wallerstein 1982, Steinmo 1996). Business in advanced democracies has likewise often been willing to pay for vocational training policies that will boost long-run productivity (Martin & Swank 2012).

So far, so good for policy investment. The difficulty arises from the fact that groups often prefer to achieve their goals through redistributive, rather than intertemporal, means—through Options 2 or 3, in **Figure 2**, rather than Option 1. Business groups, for instance, could advance their members' long-run interests by importing skilled labor from abroad rather than cultivating it at home. This redistributive strategy would shield future employers from the long-term effects of a withering skill base; but it would do so at the expense of domestic workers, who would see falling wages and diminishing job prospects. Whereas part of the costs of vertical policy investment (training) fall on employers themselves, the costs of a long-run redistributive alternative fall on other segments of society. Thus, even if vertical investment can make an interest group better off than the status quo, favorable long-term redistribution can allow the group to reap future policy benefits without paying the short-term costs of investment.

[5]Unless, that is, the aggregate long-run gains are so great relative to the distributive shift that the losing group still enjoys a net gain.

Put differently, opportunities to redistribute can impede investment in aggregate benefits. Organized interests may oppose policy investments from which they would benefit because they can achieve comparable gains through less costly (to them) redistributive alternatives.

EXPLAINING INTERTEMPORAL POLICY CHOICES: A STRUCTURAL AGENDA

I have argued that policy biases toward the short run can arise from at least three distinct sources, even in political systems populated by reasonably future-oriented actors. As I have suggested above, however, although the long run often gets short shrift from policy makers, there is substantial variation in the degree to which governments invest in the future. In light of the formidable obstacles to investment, how might this variation be explained?

Having unpacked the political problem of the long term, we are now in a good position to look for solutions. One promising way forward, I propose, lies in analyzing the conditions that modulate the three obstacles to investment: that is, in identifying the factors that shape the character of information about policy consequences, the durability of policy commitments, and the willingness of groups to engage in intertemporal bargains. To delimit the analysis, I focus here on one broad set of factors: the structural context of policy choice. By structural context, I mean both the institutional setting in which policy is made and the structure of the policy trade-offs being contemplated. Building further on prior findings on policy making, the political economy of advanced democracies, and mass political behavior, I consider in turn how institutions and policy structures can (*a*) enhance the relative quality of information about long-run consequences, (*b*) stabilize political commitments over time, and (*c*) minimize distributive opportunism by organized groups. This discussion yields a set of testable hypotheses about both the institutional conditions most propitious for investment and the kinds of investments in which governments are most likely to engage and highlights areas of particular ambiguity on which future research might productively focus.

Variation in Informational Biases

The informational obstacles to investment are comprised of two components: the high salience of information about short-run outcomes and the low quality of information about long-run outcomes. We consider structural sources of variation in each of these in turn, with **Table 1** summarizing the key hypotheses emerging from this discussion.

Information about the short run. A central insight of the literature on distributive policy reform is that the quality of information about policy losses is variable, not constant. Drawing on Arnold's (1990) logic of traceability, students of welfare-state retrenchment have demonstrated that politicians can structure policy changes in ways that make their adverse consequences difficult to detect—for instance, by burying losses in technical changes to complex tax or benefit formulae that most voters are unlikely to grasp (Pierson 1994, Weaver 2003). Investment-oriented politicians might well adopt similar design strategies, imposing losses in ways that minimize their salience. The costs of environmental protection, for instance, might be imposed on producers rather than directly on consumers.

A key analytical question, then, is how far strategies of cost obfuscation can be taken. For one thing, opportunities to disguise losses likely diminish as investments grow in size. Whereas small losses may be absorbed by producers, larger ones are bound to be passed on and made conspicuous to consumers. Such strategies also confront a possible dilemma: Efforts to avoid imposing direct

Table 1 Summary of hypotheses: effects operating on informational biases toward the short term

Type of cause	Conditions facilitating investment	Causal logic
Institutional setting	Fragmented authority	Diffuses accountability for losses
	Deliberative institutions	Enhance consideration of long-term outcomes
	Term limits	Neutralize short-term electoral considerations
	Incumbent-favoring electoral institutions	Insulate against short-run electoral risk; enhance opportunities for long-term credit claiming
Policy structure	Imposition of losses indirectly or via complex tax/benefit formulae Costs in the form of gains foregone (rather than absolute losses)	Reduce salience of short-term costs
	Quickly commencing benefit streams Investment in localized physical capital Benefits in the form of losses avoided (rather than absolute gains)	Increase salience of long-term benefits

costs on consumers may backfire if they displace those losses onto well-organized industry or labor groups, who will in turn fight pitched battles to obstruct investment. The costs of certain types of investments may also be more feasibly hidden than others: It may be easier to obscure the cost of spending-based investments (e.g., in infrastructure or schools) by spreading them across the general budget than to obscure the cost of investments designed to reshape economic and personal behavior (e.g., carbon pricing).

There are also important differences between the cross-sectional project of welfare-state retrenchment and the intertemporal project of investment. Among the most common techniques of blame avoidance in the area of social policy reform is the gradual imposition of costs over time. Yet the deferral of costs would directly undermine the logic of investment in areas, such as climate change, in which the price of delayed action is high (Stern 2006). An important question for future inquiry is under what conditions politicians can effectively obscure the kinds of sacrifice that different forms of policy investment require.

What we know about the psychology of gains and losses may provide further guidance. Consider again the differing cost structures of the investments depicted in **Figure 1**. Whereas policy B in **Figures 1*a*** and **1*c*** involves losses relative to the status quo, the investment depicted in **Figure 1*b*** involves the foregoing of potential gains. Long-standing findings on the endowment effect indicate that people tend to overweight losses relative to equivalent gains foregone (Kahneman & Tversky 1984, Thaler 1980). It should thus be substantially easier for governments to avoid punishment for imposing opportunity costs—financing investments out of current surpluses, for instance—than for imposing actual costs. This gains-foregone effect may be at work in the proliferation of rainy day funds across US state budgets in the 1980s and 1990s (Knight & Levinson 1999) and of oil funds across nations enjoying resource-revenue booms (Villafuerte et al. 2008). A similar logic should apply to investments that depend on regulatory rather than fiscal measures. It should be easier to restrict the emergence of new economic and social activities with long-run harms (e.g., banning offshore drilling before it has occurred) than to prohibit activities that are already being undertaken (e.g., coal mining in Appalachia).

Policy-making institutions can also shape the informational conditions under which voters seek to hold public officials accountable. A central theme of research on both policy reform and electoral behavior is that citizens' capacity to assign responsibility hinges on the distribution of policy-making authority. Comparative studies of welfare-state retrenchment routinely find that institutions that disperse power, as well as cross-party and neo-corporatist bargains, aid the cause of loss imposition by diffusing or displacing responsibility for unpopular measures (e.g., Bonoli 2000, Pierson 1994, Schludi 2005). These conclusions dovetail with important findings on the institutional preconditions for economic voting: Electoral reward and punishment for past performance have been found to be conditional on how sharply institutions focus political responsibility (Anderson 2000, Duch & Stevenson 2008, Powell & Whitten 1993). Greater institutional fragmentation of authority—through, e.g., separation of powers, bicameralism, proportional representation, or corporatism—should make it easier for governments to invest at low electoral risk by diffusing the blame for short-run costs (Weaver 1986).

Information about the long run. Whereas welfare-state retrenchment is commonly conceptualized as a venture in pure loss imposition, policy investment is also centrally an exercise in promising gains. Especially where policy costs are salient and traceable, the political prospects for investment should hinge critically on whether voters' attention can be drawn to an investment's long-run benefits.

Just as the structure of an intertemporal trade-off can modulate the salience of short-run costs, it should also affect the prominence of—and elites' capacity to highlight—its long-term benefits. Arnold's (1990) concept of traceability is again useful here. Like most private investments, policy investments typically deliver their gains in a stream of payoffs, rather than a lump sum. Yet, critically, policy investments vary in how soon the prospect of policy benefits first becomes visible to constituents. The timing of this visibility ought to depend, for one thing, on how quickly the stream of payoffs commences. The fiscal benefits of an investment in pension sustainability may take decades to materialize, but the benefit stream from investments in physical infrastructure such as schools, roads, or bridges will typically commence within a few years' time, once construction is finished. Even if such projects become profitable in social accounting terms only after many years of use, local citizens have tangible evidence of policy gains much sooner. In fact, some investments yield salient signs of benefit delivery even more quickly. Investments that involve the creation of local physical capital generate visible indicators of future gains as soon as ground is broken. In contrast, the process of investing in other long-run goods, such as pension solvency, happens largely out of public sight.

The psychology of losses also has implications for the prominence of future benefits. Just as the endowment effect makes us more attentive to absolute losses than to gains foregone, it makes us more interested in avoiding losses than in achieving absolute gains. A range of observational (e.g., Nincic 1997, Weyland 1998) and experimental (e.g., Arceneaux 2012, Quattrone & Tversky 1988) studies indicate that citizens are more supportive of policies that they see as preventing deteriorations in welfare than of policies offering equivalent improvements. This cognitive bias likely explains why reform-minded politicians—such as advocates of health care reform (Eckles & Schaffner 2010) or Social Security reform (Williamson 2011) in the United States—often seek to present their initiatives as preventing future catastrophe. It may also mean that voters are likely to attribute greater weight to investment benefits that constitute the avoidance of long-run losses (**Figure 1*c***) than to those that represent improvements vis-à-vis the current baseline (**Figures 1*a*** and **1*b***). These effects should also be stronger when citizens face the abrogation of specific prior benefit promises—as when a pension fund faces future financial shortfalls (Patashnik 2000)—than when the prospective losses are more diffuse (as with climate change or crumbling infrastructure).

What we know about the politics of policy making thus suggests that certain types of policy investment should generate greater opportunities for politicians to justify their short-run costs to voters. Somewhat harder to derive from the existing literatures are clear propositions about how the institutional setting of policy making might raise or reduce the profile of long-term consequences. There has been some attention to institutional processes that formally embed long-term thinking into governmental deliberations, as in Finland's strategic foresight system (Boston 2015, MacKenzie 2016). MacKenzie & Caluwaerts (2015) also present experimental evidence suggesting that institutions that foster public deliberation may enhance citizens' willingness to take longer-term policy effects into account. Yet we could use far more research on how decision-making environments, and the forms of information and considerations they generate, systematically suppress or promote the consideration of outcomes over longer time horizons.

Electoral time horizons. Voters' informational biases toward the present matter most to the extent that incumbents face competitive contests for reelection at short time intervals. Yet electoral pressures are themselves partly a function of institutional context. Reelection motives, for instance, can be dampened by term limits. Evidence from the United States suggests that term limits reduce the provision of geographically particularistic benefits ("pork"), increase attention to the needs of the state as a whole, and make legislators more attentive to the demands of conscience (Carey et al. 1998, Smart & Sturm 2013). To the extent that term limits liberate politicians to adopt unpopular policies that they believe to be welfare enhancing, they might encourage the enactment of policy investments with visible short-run costs and low-salience future benefits. Alternatively, term limits may merely make politicians more responsive to actors other than voters, such as parties and organized interests, on whom their future career prospects hinge (Carey 1998).

Institutional settings may also, in effect, reduce or extend the time intervals between competitive contests for office. Factors that threaten the stability of governing coalitions, such as highly fractionalized party systems (e.g., King et al. 1990), should shorten the time horizons over which office holders calculate electoral consequences. The opposite effect should arise from structural factors that reduce the competitiveness of elections. In liberal democratic contexts, these might include legislator-controlled redistricting processes (Carson & Crespin 2004), incumbent-friendly campaign finance systems (Meirowitz 2008), and electoral rules that disadvantage a weakly coordinated opposition (Garrett 1993). Incumbent parties that enjoy stable, built-in electoral advantages should be more willing to invest because they are both less vulnerable to short-run voter dissatisfaction and more likely to be in office when the investment's benefits visibly emerge. Studies have shown greater security in office to be associated with muted political business cycles (Schultz 1995), administrative reforms with long-run economic benefits (Geddes 1994), and investments in long-term societal change (Garrett 1993). The proinvestment effects of electoral insulation, however, are surely diminishing: At the extreme, a politician guaranteed a permanent hold on office would be indifferent to long-run credit-claiming opportunities. Likewise, as electoral time horizons lengthen, clarity of institutional responsibility might promote (rather than impede) investment, as focused accountability would facilitate credit claiming for long-term welfare improvements.

Variation in Political Uncertainty

Uncertainty is hardwired into both democratic politics and decision making for the long run. Yet there is good reason to suspect that structural features of policy making processes and policy investments themselves can modulate uncertainty about long-run policy benefits. I focus here, in particular, on the ways in which structure can help reduce political uncertainty surrounding governments' commitments to deliver future benefits. I suggest that policy-making institutions and policy structures can enhance the credibility of long-term investment benefits in both a motivational and an imperative sense (Shepsle 1991): both by incentivizing future decision makers to maintain commitments and by tying their hands. Hypothesized effects operating via the political uncertainty of the long term are summarized in **Table 2**.

Table 2 Summary of hypotheses: effects operating on long-term political uncertainty

Type of cause	Conditions facilitating investment	Causal logic
Institutional setting	Fragmented authority	Impedes policy reversal
	Institutionalized power sharing (e.g., corporatism)	Enables prospective beneficiaries to enforce long-term bargains; creates reputational costs to reneging
Policy structure	Program structures that raise visibility of reneging (e.g., trust funds)	Make policy reversal electorally costly
	Investment in nonfungible forms of capital	Impedes reneging
Institution–policy interactions	Less rigid forms of policy investment more feasible in more cooperative institutional settings	Policy rigidity and institutionalized cooperation serve as substitutes in generating long-term policy credibility

Policy-making institutions can make the benefits of policy investment less uncertain by making investments more difficult to dismantle. Institutions can generate policy stability in a general sense simply by raising the hurdles to policy change. In standard veto player models, policy stability rises, ceteris paribus, with the number of actors whose assent is required for policy change (Immergut 1992b, Tsebelis 2002). On a similar logic, Brunner et al. (2011) argue that institutional devices that impede change—such as the constitutionalization of policy or delegation to independent agencies—can make long-run commitments to carbon-reduction policies more credible. And Henisz (2000) finds that high veto-point institutional settings are associated with faster economic growth, arguing that this effect emerges from enhanced investor confidence in governments' commitment to status quo policy. We might hypothesize, along these lines, that institutional fragmentation of authority enhances the credibility of long-term policy promises (though for certain types of investments, as discussed below, fragmentation may also raise hurdles to adoption).

Yet institutions can also reinforce the credibility of intertemporal policy trade-offs in a subtly different sense: by granting veto power specifically to those actors who have been promised future policy benefits. In North & Weingast's (1989) seminal analysis of institutions and commitment in 17th-century England, what enhanced the credibility of the Crown's promises to repay its debts was the grant of expanded authority to Parliament, which represented the wealth holders to whom the Crown was indebted. On a similar logic, Lindvall (2010) derives a model of policy reform in which the credibility of commitments to distribute the future payoffs depends on institutional arrangements that give stable veto rights to all parties to the bargain (see also Scartascini et al. 2010). Corporatist bargaining institutions (e.g., Katzenstein 1985, Streeck & Schmitter 1985), consociational arrangements (Lijphart 1969), and electoral rules that encourage relatively stable patterns of cross-party cooperation display these features to varying degrees. In these contexts, credibility derives not only from the difficulty of changing past decisions but also from the capacity of those to whom something has been promised to enforce that promise. By creating stable patterns of iterated interaction, power-sharing arrangements should also make commitments credible in a motivational sense by imposing reputational costs for reneging. Although cooperative institutions like corporatism and consociationalism have been in decline in Western Europe, examining their logic may provide purchase on historical variation in levels of public investment across rich democracies. More broadly, it is worth examining how the credibility of long-range investments may be enhanced by rules that reliably empower those who expect to reap the benefits.

The public policy literature also suggests ways in which the stability of state commitments might depend on program structure. Patashnik's (2000) work on trust funds in the US budget process illustrates this point nicely. When politicians undertake a commitment to spend a new tax on a specific purpose, they sometimes entrench that commitment by channeling the new revenue stream into an identifiable account, a trust fund, that is then walled off from the rest of the budget. A trust fund helps make the spending promise credible in a motivational sense by rendering any attempt to divert the funds visible to constituents, thus raising the political costs of reneging. In a survey experiment designed to test this effect, Jacobs & Matthews (2015) find that citizens express greater willingness to pay taxes for future public goods under trust fund rules.

More generally, the literature on policy feedback considers a set of logics through which policies can generate their own bases of political support by encouraging private actors to adapt to the current regime (Patashnik 2008, Pierson 1994). Might such positive feedback effects help enhance the credibility of some policy investments? The trouble, as Brunner et al. (2011) point out, is that adaptation by social actors presupposes a credible long-term policy commitment: Firms under a carbon pricing regime, for example, will choose not to invest in carbon reducing technology in the first place if they lack confidence that policy will remain stable. Are there circumstances under which long-term policy commitments become self-enforcing, and hence ex ante credible to elites and publics, by virtue of predictable downstream effects on the behavior and preferences of social actors? This is a question worth further examination.

Further, policy structure may sometimes make public investments imperatively credible by making them technically difficult to dismantle. A key structural attribute in this regard is likely to be the fungibility of the assets that an investment accumulates. From a technical standpoint, investments in pension scheme sustainability are exquisitely vulnerable. Over the entire time horizon of the investment—from the extraction of revenues to the payment of pension benefits decades hence—the accumulated resources remain in highly convertible form: money. In contrast, investments in brick-and-mortar infrastructure or in human skills quickly convert tax dollars into nonfungible assets: the physical infrastructure or the skills themselves. Once built, a bridge (unlike a pension fund) cannot be converted into a fighter jet. Policy investments characterized by nonfungible assets thus make long-term benefit commitments more credible in the most imperative sense, making future reneging practically impossible.

Finally, we might expect policy-making institutions and policy structures to condition one another's effects. Comparative analyses of policy making under uncertainty suggest that actors view institutional context and policy design as substitute solutions to the problem of long-run commitment. Policy makers tend to select inflexible policy designs in the absence of robust institutional devices for managing uncertainty, but they favor more flexible policies when institutional environments facilitate intertemporal cooperation (Huber & Shipan 2002, Moe & Caldwell 1994, Scartascini et al. 2013). The interaction between background institutions and policy structure in underwriting the credibility of public investments is ripe for further exploration. It may be that weaker institutional environments (those that grant investment beneficiaries little capacity to enforce commitments) tend to focus policy making for the long run on lower-risk, more rigid forms of investment, whereas cooperation-facilitating institutional arrangements yield more diverse and ambitious intertemporal undertakings.

Variation in Organized Opposition

How might the structural context of intertemporal choice shape the strength and effectiveness of organized opposition to policy investment? For one thing, policy investments will vary in the degree to which they concentrate their short-term costs on organized interests. Whereas some investments impose losses on groups organized for political action, such as industry or labor unions, others diffuse their costs broadly across taxpayers or consumers. Drawing on a core insight from scholarship on distributive politics (Arnold 1990, Wilson 1980), one would expect the logic of

Table 3 Summary of hypotheses: effects operating on the opposition of organized cost bearers

Type of cause	Conditions facilitating investment	Causal logic
Institution–policy interactions	**For horizontal investments**	
	Concentrated authority	Minimizes the influence of cost bearers
	Encompassing organization with policy concertation	Turns short-run losers into long-term winners
	For vertical investments	
	Fragmented authority	Minimizes opportunities for long-term redistributive gains
	Encompassing group organization	

group conflict to facilitate investment when organized groups are spared large losses. Investments that can be readily financed out of broad-based taxes—such as those in education—ought to be among those facing the weakest organized opposition.

What are investment's prospects, however, when its costs must fall on organized interests? Here we must again consider the interaction between trade-off structure and institutional context. Another common theme in the distributive and regulatory politics literatures is that policy-making processes with greater numbers of veto points tend to enhance the influence of interest groups in shaping policy outcomes, because organized collectivities are generally best positioned to exploit veto opportunities (e.g., Immergut 1992a, Steinmo 1996). The implications of this insight for intertemporal policy choice, however, are not straightforward: As I will discuss (and as summarized in **Table 3**), the institutions most conducive to overcoming group opposition to investment should depend on the structure of the investment being considered.

Of particular importance is the distinction between horizontal and vertical investments (Jacobs 2011). When a policy investment imposes its costs on an organized interest and largely directs its future benefits horizontally toward other segments of society, the institutional logic of distributive politics should be in play: Because the cost-bearing group will mobilize to block investment, a multiplicity of veto points should make the investment more difficult to enact.

In the case of vertical policy investment, however, a different institutional logic should operate. Consider an investment that would impose its costs on a Group A but also deliver to this same group a share of the long-run benefits, making Group A better off over the long run. As discussed above, Group A's first choice would nonetheless be a redistributive policy that delivers to it comparable long-term gains through a reallocation of resources from some other group, Group B. Group A's preference ordering, then, is long-term redistribution > vertical policy investment > status quo. (As discussed above, for instance, for an industry facing skill shortages: importing skilled labor > employer-financed training investments > status quo.) The key question is therefore: Under what conditions is a favorable long-term redistribution institutionally feasible for Group A to achieve? Here, fragmented authority can work in favor of policy investment. In particular, if Group B is also organized, then a multiplicity of veto points gives Group B greater opportunity to block adverse reallocations of resources, thus preventing Group A from enhancing its long-run welfare opportunistically via redistribution. With redistributive avenues closed off, Group A can now only advance its own long-run interests through intertemporal solutions that expand aggregate welfare.

In contrast, contexts of centralized authority, which reduce the veto opportunities of prospective losers, should make vertical investments less likely by making it easier for governing parties to simply redistribute shares of the long-run social pie toward their core constituencies. Groups allied with the ruling majority can thus advance their long-term interests without resorting to costly policy investments. As I find in a comparative analysis of pension reforms, the concentration of authority in Thatcher's Britain made it relatively easy for employers to win redistributive victories, leading to a reform outcome that reduced long-run pension costs by shifting resources away from future retirees. In contrast, the fragmentation of authority in both the US and Canadian polities forced both labor and employer groups to retreat from their preferred redistributive solutions to financial strain and to accept investment-based reforms that entailed short-run costs but avoided even greater long-run losses for both groups (Jacobs 2008, 2011).

To put the point differently, the institutional logic of intertemporal choice differs from that of cross-sectional redistribution for two reasons. First, in the domain of intertemporal trade-offs, short-run losers may stand to gain in the long run—and thus may choose not to use available veto opportunities to block investments that impose costs on them. Second, redistributive and intertemporal solutions are often partial substitutes as solutions to social actors' long-term problems. It is therefore precisely when it becomes hardest for groups to opportunistically shift burdens and benefits that they should be most willing to invest in long-run aggregate gains.

More generally, then, factors that reduce the prospects for redistributing long-term welfare should boost the prospects of investment. The structure of interest representation should be especially critical. As Olson (1982) points out, more encompassing group organization reduces the scope for generating redistributive gains and, in turn, makes groups more willing to invest in aggregate gains. Martin & Swank (2012), for instance, find that more encompassing employer organization yields greater willingness to invest in public goods such as skills training. Encompassing group organization may even dampen distributional conflict over strongly horizontal policy investments. Intriguingly, Scruggs (1999, 2001) finds a strong relationship between countries' degree of corporatism and their environmental performance. As group representation becomes broader based, Scruggs suggests, those organizations whose members pay the costs of environmental protection are more likely to capture the benefits as well. Corporatism also makes it easier to turn investment's losers into winners by providing a reliable mechanism for compensating investment's short-term cost bearers with a share of the long-term social returns (Katzenstein 1985, Scruggs 1999). More encompassing organization and forms of policy concertation may thus open political space for intertemporal solutions not only by securing their future benefits but also by undercutting the logic of distributive opportunism.

Finally, some forms of policy investment generate well-organized short-term winners. As Morgan & Campbell (2011) find in an analysis of delegated governance in social policy, the actors responsible for delivering public programs can often become key constituencies for their creation or expansion (see also Mettler 2011). Policy investments often rely on a set of intermediaries who are paid to develop, maintain, and manage the creation of long-run capital: firms and workers who build physical infrastructure, teachers who impart skills, fund managers who invest accumulated retirement assets. Where these intermediaries are well organized, they may become influential advocates for policy investment, for reasons wholly unrelated to its long-term benefits. At the same time, as Morgan and Campbell remind us, the interests of organized intermediaries and those of the general public may diverge. The literature on the effects of teachers' unions suggests that their activities may yield higher incomes for senior teachers without clear improvements in student outcomes (Brunner & Squires 2013, Hoxby 1996, Hoxby & Leigh 2004). Future research ought to seek to identify the conditions under which investments driven by the advocacy of short-term winners can enhance aggregate long-run welfare.

CONCLUSION

As relatively uncharted terrain, the study of intertemporal policy choice offers an opportunity for theoretical innovation and empirical discovery around an age-old conundrum: Can democracies govern for the common good? Can a political system premised on regular and frequent competition for mass approval yield farsighted governance? Of course, the institutional and the policy structural effects considered here hardly exhaust the possible influences on policy making for the long term. Ideational dynamics, in particular, merit close consideration. Future research might explore, for instance, how societal values, the analytic frameworks employed to assess policy options, or the methods used to measure and forecast different types of social outcomes (e.g., material versus nonmaterial) shape governments' tendencies to invest in the future or in particular kinds of long-run social goods rather than others. A further important question is whether and how the politics of very long-term, intergenerational investments (like climate change mitigation) differs from that of investments in the future welfare of current generations.

Deepening our understanding of the politics of the long term will mean thinking carefully about what is distinctive about timing as an object of political choice. As I have suggested, policy making is simultaneously a struggle over who gets what and a choice about when. Unraveling the politics of the long term thus requires an analysis of politics in two dimensions, attentive to how intertemporal choices are conditioned by group struggle and to the ways in which the prospect of pursuing long-run aggregate gains shapes the terms of distributive conflict.

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