After Enactment: The Lives and Deaths of Federal Programs

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While many scholars have focused on the production of legislation, we explore life after enactment. Contrary to the prevailing view that federal programs are indissoluble, we show that programmatic restructurings and terminations are commonplace. In addition, we observe significant changes in programmatic appropriations. We suggest that a sitting congress is most likely to transform, kill, or cut programs inherited from an enacting congress when its partisan composition differs substantially. To test this claim, we examine the postenactment histories of every federal domestic program established between 1971 and 2003, using a new dataset that distinguishes program death from restructuring. Consistent with our predictions, we find that changes in the partisan composition of congresses have a strong influence on program durability and size. We thus dispel the notion that federal programs are everlasting while providing a plausible coalition-based account for their evolution.

If government's fundamental task is, as Harold Lasswell famously asserted (1936), to decide "who gets what, when, and how," then we should add, "and for how long." While much recent scholarship has focused on the production of legislation, relatively little has considered what happens to a program once elected officials have enacted it. It is not enough to characterize the course that a particular group of policy makers initially set. Scholars need to identify the enduring effects of policy makers' actions. We need to know whether their footprints were quickly washed away or left lasting imprints. Unfortunately, existing research yields few and often misleading conclusions about the trajectory of government programs.

This article analyzes the durability and size of government programs, focusing on the effects of changes in the partisan composition of congresses over time. When the composition of the congress that enacted a program differs markedly from the congress that sits in its judgment, a program should be especially vulnerable to cuts, restructuring, or elimination. Conversely, when the partisan compositions of the enacting and current congresses look much alike, a program should be less susceptible to legislative tinkering. However intuitive this logic might be, it runs against a long literature in public administration and so deserves careful empirical scrutiny.

We therefore examine the size and survival of all federal government domestic programs established between 1971 and 2003 (2,059 programs in total, yielding 20,159 program-year observations). Consistent with our predictions, we find that changes in the partisan composition of congresses have a strong influence on both program durability and spending levels. Moreover, these effects are asymmetric: program life spans are regularly shortened by partisan losses, but lengthened by partisan gains; similarly, programmatic spending predictably declines after partisan losses, but increases after partisan gains. We thus dispel the dominant notion that federal programs are "immortal" while providing a plausible coalition-based account of their varying life spans and spending trajectories.

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We proceed as follows. The first section summarizes the existing literatures on legislative productivity and relevant research on programmatic durability. The second identifies partisan turnover as a core element of distributive politics and program inheritance. The third section tests the effects of partisan coalition changes on program life spans. The fourth concludes.

Existing Literature

The bountiful literatures on program *creation* systematically examine how different rules, structures, and incentives determine the prospects for different policies to be enacted. Scholars, for instance, have shown that productivity—at least from the perspective of the president—is driven by such things as public approval or the size of the president's party in Congress (see, for example, Bond and Fleisher 1990; Edwards 1989; Frendreis, Tatalovich, and Schaff 2001; Rudalevige 2002). Others have examined how changes in the ideological composition of Congress affect the production of legislation (Binder 2003; Clinton 2007; Clinton and Lapinski 2006; Krehbiel 1998). A related literature examines the effects of divided government on lawmaking (Coleman 1999; Howell et al. 2000; Kelly 1993; Mayhew 2005). And scholars continue to scrutinize Congress's variable willingness to enact elements of the president's foreign and domestic policy agendas (Canes-Wrone, Howell, and Lewis 2008; Cohen 1982; Edwards 1986; Prins and Marshall 2001; Wildavsky 1966).

For all contributors to research on legislative productivity, the analytic enterprise is promptly suspended the moment that a law is enacted. But by investigating "what happens after a bill becomes a law" (Bardach 1977), literatures on policy implementation implicitly pick up where these previous scholars left off (for reviews, see Lester et al. 1987; O'Toole 2000). Scholarship of policy implementation, though, tends to focus on the bureaucracy as distinct from Congress and the president, and it typically treats the governing legislation itself as fixed (but see Patashnik 2008). For example, to scrutinize the behavior of elected and appointed officials within the bureaucracy, much of this research holds constant the governing statute without allowing for the possibility that the law itself may change over time. Indeed, this research typically views the possibility of a governing statute being modified by later legislators as entirely outside its analytic domain.

Taken as a whole, the research on both legislative productivity and policy implementation says precious little about how successive and overlapping generations of legislators and presidents deal with a program *after* its creation. This is not to say that scholars explicitly deny the importance of programmatic durability. The running debate over how to categorize legislation as "significant," for instance, points our attention not only to whether something was enacted but also whether its impact proved lasting (Clinton and Lapinski 2006, 2007; Mayhew 2005). And other scholars have made much of the effects of "political uncertainty" on legislative processes (de Figueiredo 2002; Moe 1989). An operating assumption of such research is that politicians, despite their best efforts, have difficulty committing future policy makers to their chosen enterprise. Uncertainty about the actions of ensuing coalitions can be defended by insulating policies with bureaucracy, these scholars note, but that strategy is costly and offers no assurance of success. Because there is "no guarantee that the legislation will stick" (Patashnik 2003, 204), both policy makers and scholars need to understand the conditions that influence program durability. As Patashnik analogizes, "losing weight is hard, but the real challenge is *keeping* it off" (226).

Rather than developing a systematic analysis of program life spans, most of these works offer what amounts to a call to arms. Indeed, only a relative handful of studies actually analyze the durability of federal programs and agencies directly. Those that do can be categorized into three groupings. The first emerges from the public administration literature and presents case studies of particular programs. Although each is interesting in its own right, these cases fail to cumulate into a coherent whole. Frantz's (1992) study of the demise of the National Hansen's Disease Center, Mueller's (1988) description of the end of the National Health Planning and Resources Development Act, and Behn's (1976) analysis of the closing of reform schools in Massachusetts are informative narratives, but they do not form a general account of program longevity.

The second assembly of studies argues that once created, federal government agencies and programs are essentially permanent. In his landmark study, *Are Governmental Organizations Immortal?*, Kaufman (1976) found that only 27 out of 421 agencies created since 1923 had been eliminated by 1973. Even among these 27 agency deaths, many in fact saw their functions persist in other parts of the bureaucracy. Kaufman's conclusions that "government organizations enjoy great security and long life" and that "governmental activities therefore tend to go on indefinitely" (1976, 64) constitute the received wisdom to this day (see, for example, Coate and Morris 1999, 1327; Daniels 1997, 5). By this account, life after enactment is uninteresting because it does not vary; agencies (and by extension, programs) simply continue to exist and tend to grow at a steady rate the longer they are on the books.

So rare is program death that individual cases can only be chalked up to random factors. Echoing Kaufman's original claims, deLeon suggests that the reason program "termination has received such sparse critical attention is that there are simply not enough cases upon which one can begin to generalize" (1978, 373). Not surprisingly, then, Kaufman's later work on organizational survival argued that "survival of some organizations for great lengths of time is largely a matter of luck" and that "longevity comes about through the workings of chance" (1991, 67). Whether one believes that programs are eliminated in an unpredictable fashion or not at all, this line of scholarship leaves little room for systematic thinking on the matter.

A final and more recent group of studies has begun to challenge these assumptions: first methodologically, by moving beyond case studies; and second substantively, by demonstrating the regularity and predictability of programmatic and bureaucratic terminations. Corder (2004) and Lewis (2002), for instance, find that over half of the federal tax credit programs and agencies that they analyzed were eliminated. Bickers' (1991) analysis of the size of government programs similarly highlights program mortality. Bickers and Stein (1995) indicate that programs are regularly created, restructured, and even destroyed. Comparable findings emerge in Maltzman and Shipan (2008), which tracks the mortality of landmark legislation; Post and Pierson (2005), which analyzes tax law; Ragusa (2009), which documents repeals of legislation; and Carpenter and Lewis (2004), which like Lewis (2002), focuses on agencies. Although each of these projects is focused on a subset of federal programs, collectively they document how factors such as divided government and national economic performance systematically shape program durability.

Building on this third group of studies, we offer a general account of programmatic growth, decline, restructuring, and death—one that focuses on coalition change as the key explanatory variable. Our study makes at least three contributions. First, unlike existing studies that focus on programmatic durability within a single policy domain, we provide a systematic and comprehensive analysis of Kaufman's seminal "immortality" thesis. So doing, we resolve some confusion in the literature. Whereas Kaufman's project and the work that followed were too often vague about what constitutes a "program," we rely on the same program definitions and classifications used by lawmakers and analyze a comprehensive database of government programs.

Second, we analyze an aspect of programmatic durability that the existing quantitative literature largely overlooks: congressional turnover. For the most part, the existing literature pays scant attention to the partisan and/or ideological relations among successive and overlapping generations of policy makers. Because they restrict their focus to political alignments at the time a law is enacted and/or a new congress considers overturning it, Maltzman and Shipan (2008) and Post and Pierson (2005) do not account for the possibility that today's congress is more likely to support bills enacted by previous congresses with similar preferences and priorities. Carpenter and Lewis (2004) recognize that "political turnover" affects the lives of agencies, but they only estimate the effect of changes in majority party on the durability of federal agencies. As we demonstrate below, majority party status in Congress is but one way in which turnover may be realized—and it turns out not to be especially important in contributing to programmatic (as compared to agency) longevity.[1]

Finally, we go beyond the old question of "immortality" to examine multiple kinds of changes made to programs. Our analysis examines the durability of programs until their death, but also identifies the correlates of program restructurings and changes in program spending. In so doing, it takes advantage of the most comprehensive database of federal government programs ever assembled, one that comprises virtually all of the federal government's discretionary commitments spanning more than three decades.

Program Inheritance and Coalition Change

A newly elected congress does not face a blank policy slate. Rather, each congress inherits the full history of policymaking that preceded it. This includes some laws that have been on the books since the early days of the Republic, but also many that were created by the congresses that recently preceded it. At any given point in the contemporary era, more than a thousand federal discretionary programs are on the books, each of which carries a financial commitment from Congress. As the literature on "path dependence" has made clear (Pierson 2004), all policymaking is done in the context of what already exists.

[1]Recognizing that programs may be transferred to another agency when the original agency is terminated, Carpenter and Lewis recommend that scholars turn their attention to programs rather than agencies. As they put it, "focusing on the termination of government programs or responsibilities as opposed to bureaus or agencies may be a more fruitful avenue for future research" (2004, 226). Moreover, as Carpenter (2001) demonstrates, tremendous programmatic innovation can take place within agencies even when their institutional structure appears to be unchanged.

The situation, we suggest, is like that of a person who inherits an old house from a departed relative. She must decide whether to accept the house as it currently stands, to begin minor or major renovations, or to tear down the house and build a new structure. The likelihood of each of these actions is determined by both the costs involved and the similarity in preferences between the original builder of the structure and its current inhabitant. We would expect the new homeowner to consider demolition more seriously if the costs are low or if her preferences are quite different from those reflected in the current home. Likewise, the preferences of the current congress must be sufficiently different from those of the congress that built the program to justify the effort required to kill or restructure it.

This view of policymaking departs somewhat from standard scholarship on Congress, but is buttressed by recent research in the American Political Development (APD) tradition. This work has a deep appreciation of temporal orderings in analyzing political change. Although this research focuses much more on formal institutions rather than on programmatic activities, its rich theoretical treatments inform our own analyses. APD scholars have aptly noted that the thickening of institutions over time creates inertia and makes programs remarkably resilient to change (Pierson 2004; Thelen 2004). As a result, institutions are not wholly recreated when a new coalition comes to power. Rather, in most cases new elements are layered on top of old ones, creating complex and often internally contradictory features (Schickler 2001). As James's recent review essay eloquently concludes, "Current politics is the dynamic expression of multiple interactions among institutionalized vestiges of a country's political past. . . . The political present is an amalgam of 'multiple orders' rooted in a nation's political history" (2009, 54).

How should we characterize the different kinds of programs that are passed from one congress to the next? At any given time, we stipulate, new federal programs emerge from larger legislative bargains over the allocation of distributive benefits among the president and members of Congress. The overall benefits of these programs, however, are not distributed either randomly or uniformly among districts,[2] but rather in accordance with the distribution of influence and preferences among representatives. For instance, members of the majority party might be expected to receive larger shares of the distributive pie (Levitt and Snyder 1995); similarly, legislators from districts and states with different ideological leanings should enact different kinds of programs (Canes-Wrone, Brady, and Cogan 2002). Collectively, then, programs created in any given legislative session tend to reflect the partisan and/or ideological distribution of legislators holding office at the time. And as the distributions in Congress change, due to electoral replacement or other factors, then the allocation of distributive spending, as implemented through federal programs, should follow suit.

This view of legislative inheritance generates straightforward predictions about the life of programs after enactment. When a new congress inherits a portfolio of existing programs, it will tend to cut, modify, or kill those programs created by those prior congresses with different priorities and preferences. By contrast, a sitting congress will preserve or better yet enhance existing programs enacted by preceding congresses with shared priorities and preferences. In other words, the greater the difference between the governing coalitions of current and enacting congresses, the more likely a program is to shrink or die; the more similar are the two congresses, the more likely a program will be preserved or expanded.

Updating of the policy status quo will not be perfect or immediate. With many programs in existence and other demands on policy makers' time, monitoring will be imperfect. The enduring policy agendas of bureaucratic agencies and interest groups, each with varying degrees of political power and autonomy (Carpenter 2001), may further limit the opportunities for a given congress to amend or overturn the existing slate of policy programs. And each congressional coalition, like the consecutive heirs of a family home, incurs costs for altering the legacies it inherits. Consequently, we can expect policy change to be "sticky" (Jones, Sulkin, and Larsen 2003). But on the margins, we expect changes in the policy preferences of Congress to be consequential. Both program durability and the sizes of programs should fluctuate according to Congress's changing composition.

Program durability also may be influenced by factors beyond partisan politics. Sometimes a program will simply outlive its usefulness. This may happen when exogenous environmental changes such as the emergence of new technologies or a crisis event demand the replacement of an outmoded program with a new one, what Kingdon (1995) would call "policy windows." On other occasions expert evaluations show that particular

[2]Whether by examining the number of districts that receive aid from individual programs (Stein and Bickers 1995), or the overall dollars that districts receive from all federal programs (Berry, Burden, and Howell 2009), the distribution of federal programmatic benefits does not conform to basic notions of universalism. In 2003, for instance, the programs examined in this article distributed aid to an average of 92 different House districts, with a standard deviation of 107. Our approach nonetheless permits some programs to be created by large coalitions. The natural variation in coalition size at enactment may explain some of the variation in durability.

programs are simply not working well (Gilmour and Lewis 2006). More generally, Kaufman's (1991) theory of organizational change points our attention to volatility in the environment in which a program finds itself. We acknowledge that new resources, technologies, values, and priorities may influence program durability. Such factors, though, are largely orthogonal to the political variables on which we focus, and hence we leave to future research a systematic evaluation of their importance.

Data and Empirical Implementation

To test predictions about the effects of congressional turnover on programmatic livelihood, we constructed a comprehensive panel dataset of federal programs created between 1971 and 2003. The data come from the *Catalog of Federal Domestic Assistance* (CFDA), a government-wide compendium of federal programs.[3] Originally published in 1965 in an effort to provide a single comprehensive source of information on the federal government's programmatic activities, the CFDA has been updated annually since 1969. It contains information about "any function of a Federal agency that provides assistance or benefits for a State or States, territorial possession, county, city, other political subdivision, grouping, or instrumentality thereof; any domestic profit or nonprofit corporation, institution, or individual, other than an agency of the Federal government" (CFDA 2005, I). "Assistance or benefits," the catalog further notes, include the transfer of almost anything of value from the federal government to a domestic beneficiary.[4] In short, the CFDA accounts for nearly all of the domestic programs that comprise the federal government.

In addition to being nearly comprehensive, the CFDA data also allow us to employ the same program definitions and classifications that are used in the lawmaking process. Each program was created by a public law, act, or executive order.[5] In addition, each program has its own line item and account number in the federal budget. Each observation in our dataset corresponds to a specific program as created and funded by lawmakers. We therefore are working within the same framework by which politicians create, manipulate, and terminate federal programs.

Massive amounts of money are appropriated each year through domestic programs created during our study period. In 2003, fully $230 billion was disbursed through the 1,006 programs created since 1971; and average spending among these programs was $237 million, and the median was $14 million.[6] These allotments range from the miniscule and obscure, such as Vocational Training for Certain Veterans Receiving VA Pension ($1,438) and the Morris K. Udall Fellowship Program ($44,922), to the massive and familiar, such as Supplemental Security Income ($31 billion) and Pell Grants ($12 billion).

To transform the CFDA into analyzable data, we refine and extend Bickers and Stein's monumental programmatic database that tracks programs from 1971 to 1990. The Bickers and Stein database has been a valuable resource for the discipline, supporting not only the work of its creators (Bickers 1991; Bickers and Stein 1991, Stein and Bickers 1995) but also of many others who have used the data in their own work (e.g., Lowry and Potoski 2004). These data contain a wealth of annual information on all programs appearing in the CFDA, including each program's function, administrative agency, beneficiaries, and expenditures. The complete, integrated dataset, which we extend through 2003,[7] thus represents a compilation of the programs contained in all editions for the CFDA over a 33-year period. All told, we have 2,059 unique programs and 20,159 program-year observations, the most complete accounting of the federal government's activities ever assembled.

Tracing the life spans of programs proved to be a painstaking endeavor. When a program that appears in one edition of the CFDA does not appear in the next, it has not necessarily died. Over time programs can undergo a variety of transformations, from mundane renaming and renumbering to more substantial consolidations, splits, and transfers between agencies. To deal with such

[3] As noted in the CFDA, "a 'Federal Domestic Assistance Program' may in practice be called a program, an activity, a service, a project, a process, or some other name, regardless of whether it is identified as a separate program by statute or regulation" (CFDA 2005, I). The catalog is published by the General Services Administration. The current edition is available online at <http://www.cfda.gov>.

[4] Specifically, "Assistance includes, but is not limited to grants, loans, loan guarantees, scholarships, mortgage loans, insurance, and other types of financial assistance, including cooperative agreements; property, technical assistance, counseling, statistical, and other expert information; and service activities of regulatory agencies" (CFDA 2005, I). Military spending and defense procurement programs are not included. In addition, the catalog excludes foreign activities of the federal government, procurement for goods and services used by the federal government itself, and the activities of quasi-governmental entities such as the Post Office and Fannie Mae.

[5] Any given authorization, though, may establish more than one program.

[6] Complete summary statistics are provided in Table A1 of the online appendix.

[7] The fate of each program in each year is reported in the following year's CFDA. Hence, to update the data through 2003, we relied upon editions of the CFDA through 2004.

complications, we traced the entire history of each program created from 1971 onward, including all of its structural alterations. We compiled these programmatic histories based on the historical profiles and cross-walk tables included in the CFDA, which also allowed us to bridge program histories across the original Bickers and Stein data and our extension. We then distinguished instances of program restructuring from program death. Taking a conservative approach, we coded as "mutations" all programmatic consolidations, splits, and transfers, but not simple renumberings or renamings. We coded as deaths only those programs that were deleted from the CFDA and did not continue on in any other form. The programs in our sample mutated 1,056 different times, and we were able to document 197 instances of actual program elimination.[8]

Figure 1 presents smoothed hazard estimates based upon two different thresholds of programmatic alterations for the observations in our sample.[9] These estimates are drawn from the raw data and indicate the instantaneous likelihood of an event occurring, given that the program has survived to that point. Panel A presents the estimates based on both mutations and deaths, and Panel B identifies only deaths. Both have dotted lines indicating the 95% confidence intervals. Contrary to previous scholars' claims about the "immortality" of federal programs, we find that a substantial number of programs change over time, and a nontrivial number of programs actually die. In its first 10 years of life a program has a 4–5% chance of either mutating or dying, and a 1% chance of outright termination *every year*. Having survived for roughly a decade, however, programs become increasingly likely to continue without alteration. Over time, these spontaneous hazards quickly add up to sizable cumulative effects. Within 20 years of creation, every program can be expected to either mutate or die; and fully 15% of programs can be expected to actually die.

Basic trends in these data are consistent with our theory. Consider, for starters, the shape of the hazard functions, which demonstrate that mutation and death are most common in the first 10 to 15 years. During the period we analyze, the partisan composition of the House and Senate typically changed rather dramatically within any given 15-year period. Having survived five to seven congresses, and thereby demonstrated an ability to satisfy members from both the Democratic and Republican parties, a program then appears to be in the clear. It is also possible, though, that programs require roughly a decade to build the support they need from interest groups, bureaucratic agencies, and expert evaluators to withstand subsequent congressional scrutiny.[10]

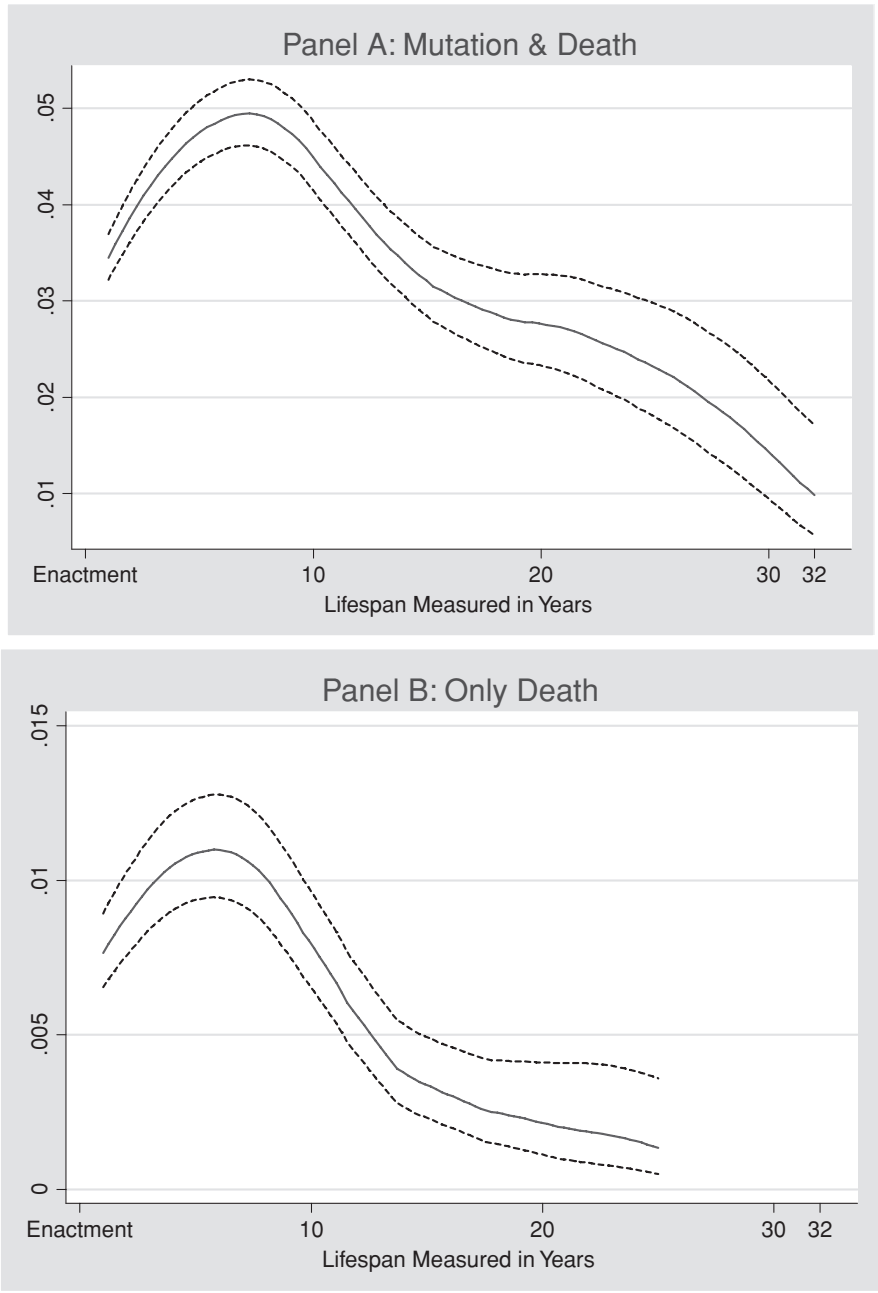
Similarly, the years that experienced the highest rates of programmatic death tended to coincide with high levels of congressional turnover. For instance, the first year of the Reagan administration saw a disproportionate number of program deaths, at the same time that Democrats lost 35 seats in the House and control of the Senate. In 1981 alone Congress dismantled programs including the Meat and Poultry Inspection Loans administered through the Small Business Administration and the Department of Education's Incentive Grants for State Student Financial Assistance Training. For similar reasons the mid-1990s saw a jump in program deaths as a new conservative majority took the ax to programs viewed as too liberal. And other programs were terminated by Democratic congresses when the distribution of preferences shifted leftward, as when the emboldened majority did away with the Export Market Development program for agricultural products following the 1974 landslide. In short, simple examinations of these raw data cast doubt on the contention that programs are immortal, and also reinforce our emphasis on political coalitions as agents of programmatic change.

[8]There are instances when programs mutate or die in one year only to be reborn in another. The hazard models estimated below account for this eventuality. Mutations and deaths, as defined here, could in principle be treated as competing events, recommending the estimation of a competing hazard or multi-episode model (Blossfeld, Hamerle, and Mayer 1989, 57–64, 75–79). For three reasons, however, this is not feasible. First, conventional multi-episode models have well-defined units—tracking, for instance, individual transitions into and out of full employment, partial employment, and unemployment. Mutations, though, typically involve consolidations and splits of programs, which wreak havoc on this underlying assumption. Second, and related, mutations in our data are treated as terminal nodes. While we can identify the exact year when a program transitioned states, we do not know how long it remained in the latter. The final issue concerns the definition of an episode. Though a mutation signifies an important change in a program's structure, there does not exist a clear and finite set of episodes in and out of which programs transition.

[9]Specifically, the graph presents the estimated hazard functions using a kernel density smoother.

[10]One might be tempted to infer that the higher frequency of mutations and deaths in the first decade of a program's life is the result of preprogrammed sunsets, demonstration programs with short lives, or expired authorizations. But this appears not to be the case. Though the role of sunset provisions in program demise warrants further inquiry, we have no reason to believe that the omission of this factor threatens the validity of our analyses. Because partisan seat change results from inherently unpredictable election outcomes that occur after sunset provisions are in place, the two variables should be uncorrelated and therefore omitted variable bias of this sort is not a concern for the models presented below. Future work on sunset provisions, though, might test for temporal discontinuities in the hazard, as discussed in Carpenter et al. (2008).

FIGURE 1 Program Hazard Functions



The top panel identifies both programmatic mutations and deaths; the bottom identifies only deaths. In both, the vertical axis represents smoothed hazard estimates. The horizontal axis represents time. Dashed lines depict 95% pointwise confidence bands.

Mutation and death, however, are not the only fates awaiting a program. Existing programs undergo continual fiscal tinkering, some growing in scope and others withering as ensuing congresses see fit. Controlling for inflation, the average program grew by 2.6% annually over our study period. The 90th percentile of annual program growth was positive 59%, while the 10th percentile was negative 20%. Indeed, budgetary cuts in real terms constituted fully one-third of all program spending changes. So if one considers changes in the dollars spent on programs, it seems even less appropriate to view federal activities as immutable.

Modeling Program Survival and Spending

These basic descriptive results illustrate just how eventful life after enactment can be. Programs grow, decline, and even die with astonishing regularity. We now take the further step of relating program size and longevity to congressional politics, specifically the disparities between the preferences of the congress that enacted the program and those of current members.

We start by considering the impact of changes in the partisan composition of the enacting and the current congress. To do so, we posit program evolution as a general function of the form $S_{ijk} = f((C_k - C_j), \mathbf{X}_i, \mathbf{Z}_k)$, where S_{ijk} denotes the size or survival of program i, which was enacted by congress j and is currently under the control of congress k. The primary quantity of interest, $(C_k - C_j)$, represents differences between the current majority coalition and the coalition that enacted program i, which we explain below. $\mathbf{X}_i$ is a vector of program attributes, and $\mathbf{Z}_k$ is a vector of attributes of the economic and political environment at the time of the current congress, k. We estimate hazard models to predict program death, and we use panel ordinary least squares to estimate program spending.[11]

Our unit of analysis is a program-by-year observation. Using data on federal domestic programs, we match each program created since 1971 to attributes of the congress that enacted it.[12] In each year following its creation, we compute differences between its enacting congress and the congress currently in power. We then use these differences to predict program survival and size during the current year. For example, in 1980 Republicans held 158 House seats and 41 Senate seats (an interchamber average of 38.7%) but by 1996 had increased that to 230 in the House and 52 in the Senate (a 52.5% average). We expect that in 2000, Congress, with an average of 50.7% Republican seats between the two chambers, would be more likely to cut or kill a program enacted in 1980 than a program enacted in 1996, all else equal.

To measure the relative distance between a congress that creates a program and a congress that subsequently decides its fate, $(C_k - C_j)$, we calculate the net percentage of seats that changed parties between the enacting and current congresses, averaged across the House and Senate. We expect that the effects of $(C_k - C_j)$ depend on whether the majority party has gained or lost seats between the time when the program was created and the current congress. Seat losses may improve the likelihood that a program is altered, killed outright, or its appropriation decreased. In contrast, when a majority party gains seats from the time of a program's enactment, we expect mutation and death to be less likely and spending on that program to increase. To reflect this asymmetry, our models therefore include separate measures of seat gains and losses by the majority party in the enacting congress. That is, we calculate $(C_{km_s} - C_{jm_s})$, where m identifies the majority party at the time a program is enacted and the subscript s denotes the share of seats that this party holds for the congress specified by k or j, and then introduce a spline with a single knot at zero.[13] Of course, a governing coalition includes the legislative branch as well as the executive. We expect changes in the presidency to work in a similar fashion, so we include a dummy variable for whether the party of the president changed between the enacting and current congresses.

Second, we allow for the marginal effects of partisan turnover to depend on the age of the program. The true marginal effects associated with changes in our main covariates of interest, after all, may vary during the course of a program's life span. Over time, external interest groups and internal bureaucracies can be expected to grow around a program, insulating it from political and economic disturbances. Consequentially, the relevance of a given value of $(C_{km_s} - C_{jm_s})$ for survival may depend upon whether a program was just recently created or whether it has sat on the books for decades. In different ways, the models below explicitly account for this time dependence.

Background Controls

Although the existing literature does not provide much guidance, it seems plausible that multiple factors beyond turnover affect the durability of programs. We therefore estimate models that control for characteristics of the

[11] Our data are never left censored, since we are considering only those programs that were created after 1971. The data, however, are right censored whenever programs either continue beyond 2003 or mutate since they can no longer be tracked. Our maximum likelihood estimates account for this right censoring.

[12] Our approach of linking each program to the congress that enacted it is akin to the common practice among judicial scholars of inferring the ideological orientation of justices from the partisan identification of the president who appointed them. An ideal approach might be to tie programs to the actual legislators who voted for their creation on the floor of the legislature; this approach is impossible to implement. Programs are seldom created in one clean action such that supportive legislators can be identified. They are often embedded in larger pieces of legislation and then modified over time as parts of other legislative packages.

[13] In the main models presented, we average the percentage gains and losses experienced by a majority party from the enacting to the current House and Senate. In some instances, the majority party may be different in the two chambers. As we discuss below, we also estimate separate models for each chamber.

programs themselves, $\mathbf{X}_i$, as well as economic and political indicators at the time each congress considers a program's fate, $\mathbf{Z}_k$. The time invariant program attributes are of two types. First is a control for (the log of) spending on that program in its initial year of existence, which distinguishes large from small programs. The second set of program controls is an array of program types indicating how funds are allocated. Here we follow Stein and Bickers (1995), who demonstrate important differences among programs that are traditional spending, underwrite loans, rely on formulas, support specific projects, or insure against risk. Although our project is not immediately interested in how durability varies across these types, they serve as important controls since the mix of types has varied over time.[14]

Other time-varying controls in our models account for the environment in which programs were initially enacted and then subsequently evaluated. These are drawn in part from the literature on government productivity cited earlier. First, to evaluate effects of national economic performance on program durability, we include measures of both the level (in trillions of 2000 dollars) and year-to-year percent changes in gross domestic product.[15] Our expectation is that program spending and longevity should be greater when the nation's economy is larger or experiencing growth, if only because it produces more tax revenue for elected officials to spend.[16] Second, to account for the possible budgetary trade-offs between "guns" and "butter" during war, we include an indicator variable for times of war.[17] Third, we include a dummy variable for divided government.[18] Because most of the literature suggests that divided party control impedes production of legislation, we allow for the possibility that it may also impede program death or increased spending. Fourth is a dummy variable for the first year of a congressional term, which has been shown to produce more legislation than the second year of the session. Finally, we incorporate public opinion toward government activism in the form of Stimson's (2004) "public mood" measure. The first dimension of this measure has been shown to influence legislative productivity because it indicates the public's desire for government action. We might thus expect higher (more activist) levels of public mood to be associated with greater durability and spending increases.

The purpose of these particular controls is to ensure that the coefficients we observe on the coalition change variables do in fact represent the effects of these factors rather than spurious attributes of the program or legislative environment. As we discuss further below, however, alternative models that include either subsets of these variables, presidential fixed effects, or additional characteristics of the economy and politics at the time of a program's enactment yield comparable findings. Moreover, we do not claim that these particular background controls amount to an exhaustive accounting of all factors that influence a program's life span after enactment. Technological innovations, a program's objective success or failure, geographic distributions of programmatic benefits, the particular policy mechanism by which a program was created, and demographic changes may also influence the probability that a program is killed, restructured, or cut. Future studies would do well to investigate their impacts on programmatic durability and growth. As previously noted, though, these factors are expected to be orthogonal to changes in the partisan composition of Congress, and hence are excluded from the models presented below.

Survival Results

We estimate two companion sets of models predicting program survival and size. The first concerns the effect of congressional turnover on a program's life span, which we estimate via Cox hazard regressions, which have the benefit of making no assumptions about the functional form of the hazard. We test the proportional hazard assumption for each covariate, and we interact those covariates that have been shown to violate standard proportionality assumptions with a linear measure of program age (Grambsch and Therneau 1994).[19] We expect that the

[14]Full descriptions of the funding schemes are available at <http://www.polsci.indiana.edu/faad/codebook.txt>. Categories are not mutually exclusive, so none of the dummy variables is excluded from the models.

[15]Gross domestic product data were provided by the Bureau of Economic Analysis in the Department of Commerce and are available at <http://www.bea.gov/national/index.htm#gdp>.

[16]As an alternative economic measure, one might include the federal budget balance under the assumption that large deficits tend to dampen spending and surpluses would encourage it. We do not use this measure because of its endogeneity with appropriations; spending is as likely to affect deficits as to be affected by them.

[17]We identify the Vietnam War (through 1975), the Gulf War (1991), and the conflicts in Afghanistan and Iraq (2002 onwards).

[18]This measure identifies whether either the House or the Senate is controlled by the opposite party as the president's. The core findings remain intact when we focus on just the House or the Senate.

[19]That is, rather than estimating the standard Cox proportional model specified as: $\lambda(t \mid x) = \lambda_0(t)\exp(B^t x)$, where $\lambda_0(t)$ identifies the baseline hazard, x is a vector of covariates, and B^t is a vector of coefficients; we instead estimate $\lambda(t \mid x) = \lambda_0(t)\exp(B^t(t)x)$, where $B^t(t)$ now is a function of follow-up time. We lack strong theory about the appropriate characterization of this function, and therefore we have estimated a variety of specifications. The main results appear consistent across these models. For ease of interpretation, we therefore focus on the results from a linear representation.

TABLE 1 Predicting Program Life Spans, 1971–2003

Explanatory Variable	Mutation and Death		Only Death	
Majority party seat gains	−2.24	[1.95]	−15.93***	[5.15]
Majority party seat losses	8.46***	[1.61]	7.17***	[2.42]
Change in party of president	−0.21	[0.14]	0.16	[0.18]
Majority party seat losses × Program age	−0.34**	[0.14]	–	
Change in party of president × Program age	0.06***	[0.02]	–	
Spending in enacting year (log)	−0.07***	[0.02]	−0.12***	[0.03]
Formula	−0.13	[0.14]	0.05	[0.34]
Project	0.01	[0.12]	0.21	[0.26]
Direct spending (specified)	−0.20	[0.17]	0.05	[0.38]
Direct spending (unspecified)	0.04	[0.31]	0.66	[0.66]
Direct loan	0.26	[0.19]	0.97***	[0.27]
Guaranteed loan	0.00	[0.21]	0.88**	[0.36]
Insurance	−0.97*	[0.59]	0.95	[0.66]
Other	−0.42***	[0.12]	−0.28	[0.25]
GDP, levels (trillions)	−0.10***	[0.03]	−0.25***	[0.08]
GDP, year-to-year percent changes	0.01	[0.02]	0.05	[0.04]
War	0.62***	[0.12]	−0.05	[0.36]
Divided government	0.03	[0.10]	0.95***	[0.28]
First year of congressional term	0.23***	[0.06]	1.01***	[0.19]
Public mood (first dimension)	−0.09***	[0.02]	−0.18***	[0.05]
Number of Observations	18,739		19,169	
Log Pseudo-Likelihood	−6,685.91		−1,130.48	

2,130 total programs, 858 mutations, and 197 deaths recorded. Model 1 identifies both programmatic mutations and deaths; model 2 identifies only deaths. Standard errors clustered on program reported in brackets. *sig $p < .10$, two-tailed test; **$p < .05$; ***$p < .01$. Cox regressions estimated with Breslow method for ties. Interactions with linear characterizations of analysis time included in model 1 to account for violations of proportionality assumptions; tests of nonzero slopes of the scaled Schoenfeld residuals of time for all other covariates in this model, and all covariates in model 2, yield null effects.

marginal probability of either mutation or death in any given year, conditional upon having survived until then, will increase as the majority party loses seats between the enacting to the current congresses but will decrease as the enacting majority party's seat share increases.

Table 1 presents the results. We model program mutation and death together in the first model and then death independently in a second model. As explained above, *mutation* identifies any substantive change in a program (including a split, consolidation, or transfer), whereas *death* refers to the subset of cases where a program actually ceased to exist. We find evidence that changes in partisan coalitions do affect program durability; moreover, and as we anticipated, the effects are asymmetric. Seat losses by the enacting majority party increase the hazard in models that set the threshold for a spell's termination at mutation (model 1) and death (model 2), while seat gains sharply decrease the hazards. These results suggest that changes in congressional coalitions have important impacts on the mutation and death of programs, despite the stickiness of public policies and the resistance of the interests they serve. Changes in the party of the president, however, do not appear to increase the hazard.[20]

In model 1, two covariates (majority party seat losses and change in party of the president) did not satisfy the proportional hazard assumption, and therefore we allowed their effects to covary with the age of the program. Their interactions provide suggestive evidence that over the life span of a program, the marginal effects of majority party seat losses attenuates; that is, seat share losses early

For more on the applications of nonproportional hazard models in political science, see Box-Steffensmeier, Reiter, and Zorn (2003).

[20]We note, however, that when dropping from the model the congressional turnover variables, the effect of partisan change in the president appears positive and significant. Dropping the president variable does not alter the estimated effects of congressional turnover.

in a program's life span have a greater impact on the probability of death than do seat shares later in the program's life span. Interestingly, the marginal effect of changes in the party of the president would appear to increase over a program's life span.[21]

In model 2, both global and individual tests of proportionality yield null results, indicating that all covariates satisfied the proportional hazard assumption. This model suggests that when the enacting majority party loses an average of 10% of seats across the two chambers, the marginal probability of death approximately doubles; when the enacting majority party gains 10% of seats, the marginal probability of death drops by 80%. To put this in perspective, when keeping all other variables at their means, the estimated impact of a one standard deviation increase in majority party losses is over twice as large as that of a one standard deviation decline in the GDP. The estimated impact of a one standard deviation increase in majority party gains is approximately one-third as large as that observed for a one standard deviation increase in the GDP.

The effects associated with our control variables are generally consistent across both sets of models. Programs are less likely to be altered or killed if their initial appropriations are substantial—that is, smaller programs are easier to dismantle. We find only minimal differences among programs that allocate funds in different ways. There is evidence that loan programs are more likely to die but insurance programs are less likely to be altered or killed. Otherwise, though, there do not appear to be large differences in the durabilities of different types of programs.[22]

All programs appear more vulnerable to both mutation and elimination when GDP is low. Year-to-year changes in GDP, however, do not significantly affect either hazard rate. As one might expect based on our theory of program inheritance, programmatic changes and terminations are especially likely to occur during the first year of a congressional term just as a new coalition of legislators takes office. Programs are more likely to be altered or killed during times of war, perhaps reflecting trade-offs in budget priorities. Consistent with the literature on lawmaking, we find mixed evidence that divided government influences program mutation or death. Divided government appears to increase the hazard of death in model 2. Finally, program durability is quite sensitive to public opinion, captured here in the form of "public mood." When the public calls for less government activity, programs are in fact more likely to be altered or eliminated.

We also have estimated models that use alternative background controls and that focus on subsamples of the universe of programs created between 1971 and 2003. For instance, when using the federal deficit in place of GDP in all of the models or dropping baseline spending from any of the models, all the main results hold. We also have estimated models that exclude loan and insurance programs, whose spending is more difficult to measure. Once again, all the main findings hold. Complete results are available in Tables A2–A5 of the online appendix.

Spending Results

The results presented thus far pertain to the discrete outcomes of program death and mutation. To facilitate a more subtle understanding of how programs change over time, Table 2 presents analogous models of program spending. For comparability, the model specification matches those in Table 1, with the exception that the dependent variable is now the change in logged, inflation-adjusted spending on programs between the enacting and current years.[23] Additionally, to account for the possibility that older programs tend to have a stronger contingent of political allies to advocate on their behalf (something we do not observe directly), we control for each program's age.[24]

The results, by and large, mirror those observed in the mutation and death models. As before, losses in congressional seats for the enacting majority correlate with spending decreases, and gains correlate with increases. When an enacting majority party loses 10% of the seats, on average, in the House and Senate, spending on its programs declines, on average, by one-tenth of one percentage point; and when the majority gains 10% of seats, spending increases by six-tenths of a percentage point. With average spending growth of 2.6 percentage points,

[21]We are hesitant, however, to make very much of this finding. When estimating models that include only measures of congressional turnover or only measures of presidential turnover, we do not find any evidence that proportionality assumptions have been violated.

[22]Because programs can belong to more than one of these categories, there is no reference group.

[23]We use appropriations rather than outlays as our spending measure. The rationale for this approach is that Congress focuses its budgetary activity on setting appropriations levels, which are thought to be closely tied to actual spending levels. Our statistical results below are actually stronger if we substitute actual outlays as the dependent variable. All dollar amounts are measured in inflation-adjusted 2000 dollars.

[24]The models below include only a linear expression of age. We have estimated models that include quadratic and cubed terms, though these variables are never statistically significant.

TABLE 2 Predicting Programmatic Spending, 1971–2003

Explanatory Variable	Spending	
Majority party seat gains	5.68***	[1.14]
Majority party seat losses	−1.42*	[0.82]
Change in party of president	0.01	[0.04]
Spending in enacting year (log)	−0.25***	[0.03]
Formula	0.79***	[0.17]
Project	0.21*	[0.12]
Direct spending (specified)	0.37	[0.23]
Direct spending (unspecified)	0.85	[0.53]
Direct loan	0.07	[0.18]
Guaranteed loan	0.83***	[0.25]
Insurance	0.38	[0.59]
Other	−0.17	[0.11]
Age of program	0.03***	[0.01]
GDP, levels (trillions)	0.05***	[0.02]
GDP, year-to-year percent changes	0.01***	[0.00]
War	0.24***	[0.04]
Divided government	−0.01	[0.03]
First year of congressional term	−0.01	[0.01]
Public mood (first dimension)	−0.03***	[0.01]
Constant	5.39***	[0.59]
Adjusted R^2	0.14	
Number of Observations	17,988	

The dependent variable is the difference in a program's logged, inflation-adjusted spending in current and enacting years. Standard errors clustered on program reported in brackets. *sig $p < .10$, two-tailed test; **$p < .05$; ***$p < .01$.

these effects translate into a 4% decline and 23% increase in the rate of growth, respectively. Substantively, the estimated impact of a one standard deviation increase in majority party losses is roughly 70% as large as the estimated impact of a one standard deviation decline in the GDP growth rate. The estimated impact of a one standard deviation increase in majority party gains is almost twice as large as that observed for a one standard deviation increase in the GDP growth rate. Consistent with the hazard results, though, changes in the president's party do not appear to influence spending levels.[25]

Programs with larger initial endowments also tend to see smaller percentage increases in their budgets. To some degree this is because small percentages still translate to large numbers when computed on large initial appropriations, but also because smaller programs tend to be more volatile (Levitt and Snyder 1997). As in the hazard models, we find only modest evidence that program type affects spending. While formula-based and guaranteed loan programs see more spending increases, there are no differences among other kinds of programs.

Also as expected, a larger GDP and larger increases in GDP both tend to facilitate more spending, presumably because more tax revenue is available to policy makers. Perhaps counterintuitively, war increases spending. Rather than a trade-off between domestic and defense budget priorities, war appears to stimulate spending on many types of programs. Again divided government has no effect on spending patterns once programs have been created. Spending is no lower in the first year of a congressional term than it is in the second. Age correlates positively with spending, perhaps because of the organizations that build up around programs over time and make them more effective at advocating for additional state resources, or because weak and unsuccessful programs (qualities we do not observe) die off, while stronger and more popular ones perpetuate. Finally, public opinion runs counter to what one might expect, as a more

[25]When adding to the model an interaction between change in the party of the president and a program's age, the main effect for presidential turnover is −0.08 ($p = .18$), and the interaction is 0.01 ($p = .02$), suggesting a modest initial decline in spending that fades over time. We do not find evidence, however, of a meaningful interaction between a program's age and measures of congressional turnover.

TABLE 3 Alternative Measures of Turnover

Explanatory Variable	Mutation and Death		Only Death		Spending	
House Only						
Majority party seat gains	−0.77	[1.37]	−10.36***	[3.79]	4.45***	[0.91]
Majority party seat losses	5.96***	[0.90]	8.67***	[2.29]	−0.92	[0.72]
Senate Only						
Majority party seat gains	−5.73	[3.79]	−23.52***	[8.10]	1.96	[1.25]
Majority party seat losses	5.92***	[1.27]	7.42***	[3.09]	−0.97	[0.89]
Majority party seat gains × Program age	0.95***	[0.34]	2.55***	[0.88]	–	
Majority Turnover						
Number of institutions that change party control	0.29***	[0.04]	0.47***	[0.12]	−0.03*	[0.02]
NOMINATE						
Shifts to extremes	−1.27	[0.94]	−7.34***	[2.34]	1.82***	[0.52]
Shifts to center	1.93***	[0.49]	2.59**	[1.21]	0.00	[0.30]

The first two models include the covariates shown in Table 1; the third model includes the covariates shown in Table 2. Results presented only for key covariates of interest. (Complete results are shown in Tables A7–A10 of the online appendix.) Standard errors clustered on program reported in brackets. Interactions with linear characterizations of analysis time included in the Senate Only results to account for violations of proportionality assumptions; where needed, interactions between other unreported covariates and analysis time were included. *sig $p < .10$, two-tailed test; **$p < .05$; ***$p < .01$.

activist public mood translates to less spending, but that might reflect the "thermostatic" or countercyclic nature of public mood, which tends to move in the opposite direction of government policy (Stimson 2004; Wlezien 1995).

These results also are robust to a wide variety of alternative specifications, which are shown in Tables A2–A6 of the online appendix. As in the hazard models, the main results hold when including alternative background controls and focusing on various subsamples of programs. Additionally, we have estimated models that substitute year fixed effects for all year-specific covariates. These models yield estimates that are comparable in magnitude to those presented above.

Alternative Measures and Model Extensions

In Tables 1 and 2, we identify the average number of House and Senate seats that the majority party either lost or gained between the time of a program's enactment and the current congress that stood in its judgment. There are obviously alternative ways of characterizing turnover. For instance, one might worry that aggregate measures of congressional turnover mask important chamber-specific trends. Table 3 presents results that substitute measures of House and Senate turnover for those on overall congressional turnover. Though the estimates attenuate somewhat, the basic pattern holds. To conserve space, we only report the main covariates of interest in Table 3, although we include the full set of control variables in all the models.[26]

In a variety of ways, we have explored the possibility that changes in majority party status between the current and enacting congress, rather than changes in individual seats, drive programmatic duration and spending. Following Erikson, Mackuen, and Stimson (2002), we construct a counter that runs from zero to three that identifies the number of institutions (House, Senate, and presidency) to have switched party control. As Table 3 shows, when substituting this counter for all the other turnover variables, we find that majority party changes increase the hazard in both the mutation and death models and decrease appropriations in the spending models. Notably, though, when including the counter along with our measures of seat change, the former is significant in only the mutation models, while the estimated effects of the latter remain unaffected in all of the models.

Rather than consider partisan seat shares, one might instead examine changes in the ideological composition of Congress. To wit, we have estimated models using DW-NOMINATE scores. Rather than identify whether the majority party gained or lost seats, however, we identified whether the median of either chamber as a whole shifted

[26]Complete results can be found in Tables A7–A10 of the online appendix.

in a more moderate or extreme direction. The findings presented above would suggest that shifts to the extremes of the ideological spectrum (that is, conservative congresses at enactment becoming more conservative, and liberal congresses becoming more liberal) should decrease the hazard and increase spending; moderating shifts (that is, conservative congresses at enactment becoming more liberal, and liberal congresses becoming more conservative) should increase the hazard and/or decrease spending.

The results, for the most part, comport with our expectations. When the prevailing ideological leanings of the enacting congress are strengthened, the marginal probability of mutation is unaffected, the marginal probability of death is decreased, and spending increases significantly. By contrast, when the prevailing ideological leanings of the enacting congress are weakened, the marginal probability of both mutation and death increases, while spending is unaffected.

Additional Model Extensions

On the whole, then, there appears to be solid empirical support for the claim that partisan turnover increases the odds of spending cuts, program mutation, and program death. It is less clear, however, which of the various options a particular congress will choose. How, for instance, does Congress decide between mutation and death? And are structural changes and spending cuts mutually exclusive options?

As shown in Table A11 of the online appendix, we estimate the probability that Congress kills a program rather than restructures it, conditional upon having decided to do one of the two. A simple logistic regression that includes all of the main descriptive variables identified above shows that gains in the majority party size decrease the probability of death (and increase the probability of restructurings), while losses increase the probability of death (and decrease the probability of restructurings). The estimated effect of majority party gains is significant ($p = .09$), while the effect of losses is not ($p = .30$).

We also investigated the trade-offs between mutation and spending cuts. In any given congress, the decision to kill a program, by definition, requires setting programmatic spending to zero. It is less clear, though, what relationship (if any) might emerge between simple restructurings and spending. We therefore add to the main spending models a variable that identifies whether a program was restructured in a given year (see Table A12 of the online appendix). We find that restructurings tend to accompany spending cuts of, on average, 43% ($p < .01$). As one might expect, the magnitude of the relationship between restructuring and spending varies according to whether the majority party at the time of a program's enactment subsequently gained or lost seats. Decisions to restructure a program in the face of losses coincide with spending cuts that are 50% larger on average than those decisions that occur in the face of gains.

Our analyses to this point have unearthed considerable evidence that the probability that a program is cut, transformed, or killed is increasing in differences between the current and enacting congresses. It is likely, though, that other twists and turns in the makeup of the institution during the intervening years matter as well. A sitting congress, after all, typically is not the first to inherit a particular program; rather, the sitting congress is simply the latest in a succession of congresses, each of which had the chance to have its way with programs that it found objectionable. When the 106th Congress revisits a program enacted by the 94th, it does so after fully 11 other congresses had the opportunity to restructure or eliminate it.

Table 4 presents the results of models that include an indicator variable that identifies whether a program

TABLE 4 Between the Current and Enacting Congresses

Explanatory Variable	Mutation and Death		Only Death		Spending	
Majority party seat gains	−3.48*	[1.91]	−17.91***	[5.19]	5.63***	[1.16]
Majority party seat losses	7.13***	[1.58]	5.28***	[2.35]	−1.45*	[0.85]
Survived more hostile Congress	−0.45**	[0.17]	−0.84***	[0.26]	−0.02	[0.03]
Majority party seat losses × Program age	−0.42***	[0.13]	–		–	
Survived × Program age	−0.03**	[0.02]	–		–	

The first two models include the covariates shown in Table 1; the third model includes the covariates shown in Table 2. Results presented only for key covariates of interest. (Complete results are shown in Table A13 of the online appendix.) Standard errors clustered on program reported in brackets. Interactions with linear characterizations of analysis time included in model 1 to account for violations of proportionality assumptions; where needed, interactions between other unreported covariates and analysis time were included. *sig $p < .10$, two-tailed test; **$p < .05$; ***$p < .01$.

has already survived a more hostile congress (measured by relative seat losses of the majority party) than the current one. In the hazard models, the estimated effects of our main variables of interest (measures of partisan turnover) remain significant and in the expected direction. And as one would expect, having survived a more hostile congress tends to decrease the hazard; and as the interaction with age indicates, its effect is magnified over a program's life span. In the spending models, however, the added indicator variable is not significant, and the estimated effects of our measures of partisan turnover remain virtually unchanged.

Conclusion

Until quite recently, scholars had set their sights almost exclusively on the politics surrounding the enactment of programs and other legislative initiatives. In this article, we show that there is life, alteration, and indeed death after enactment. Using a novel dataset on spending, mutation, and termination, we present the first quantitative study of the postenactment lives of all federal discretionary programs enacted over a 22-year period.

Our hazard and spending models demonstrate that life after enactment is not invariant nor is it so idiosyncratic as to be unexplainable. Rather, changes in the ideological and partisan character of Congress help explain why programs are more or less likely to survive. We find that a program is vulnerable to termination, spending cuts, and other changes when the congress that inherits it is different in partisan terms from the congress that created it. Allowing for asymmetric effects of partisan change, we find that programs are particularly imperiled when their enacting majority loses seats in future congresses but are more likely to survive and increase their funding when a majority gains seats.

Research on this topic should not end here. This article presents only the average effects of partisan turnover on programmatic spending, mutation, and death. But such estimates may mask considerable variation. It is possible, for instance, that Congress is more likely to revisit programs with sunset provisions when the programs are up for reauthorization; or that during times of economic expansion, congressional turnover may not bode so poorly for programs as during times of economic decline; or that the marginal effects documented here are occasionally overwhelmed by larger patterns of historical growth and decline in the state. More generally, it is important to extend analyses of program duration beyond the period we have examined, 1971–2003. The specific period we studied is characterized by relatively large partisan turnover, moderate programmatic expansion, increasing administrative capacity, dramatic growth in entitlement spending, and a mature welfare state. Our results may not generalize straightforwardly to, say, the New Deal period or earlier eras. Though lack of comparable data may prohibit similar quantitative analysis, more research into program evolution and death in other periods is clearly warranted.

Recognizing that the policy slate is never clear, this article establishes a foundation for future empirical studies of programmatic life spans. In addition to deciding what new legislation to enact, every congress must revisit the thousands of programs that reside on the books. What these members decide to do about each of these programs, we suggest, fundamentally depends upon their partisan affiliation with those who first enacted the program.

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Supporting Information

Additional Supporting Information may be found in the online version of this article:

Table A1: Summary Statistics
Table A2: Predicting Program Life Spans & Spending, 1971–2003: Substituting Deficits for GDP
Table A3: Predicting Program Life Spans & Spending, 1971–2003: Dropping Baseline Spending
Table A4: Predicting Program Life Spans & Spending, 1971–2003: Adding Presidential Fixed Effects
Table A5: Predicting Program Life Spans & Spending, 1971–2003: Excluding Loan and Insurance Programs
Table A6: Predicting Program Spending, 1971–2003: Including Year Fixed Effects
Table A7: Predicting Program Life Spans & Spending, 1971–2003: House Only
Table A8: Predicting Program Life Spans & Spending, 1971–2003: Senate Only
Table A9: Predicting Program Life Spans & Spending, 1971–2003: Majority Turnover
Table A10: Predicting Program Life Spans & Spending, 1971–2003: NOMINATE
Table A11: Predicting Program Mutation, 1971–2003: (Baseline = Killed Programs)
Table A12: Predicting Program Spending 1971–2003: Including Program Restruction Indicator as a Covariate
Table A13: Predicting Program Life Spans & Spending, 1971–2003: Accounting Interim Histories