Organizational Demography

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Synonyms

Mortality; Organizational survival; Structure of government; Termination

Definitions

Termination	An organization is considered terminated if it is fully abolished, merged with another organization, or split into different autonomous new entities.
Transition	An organization experiences a transition if it is either terminated, absorbed by another organization, or succeeded by another organization with a new name, at a new level of operation, or with other new structural characteristics.

Introduction

Do bureaucracies become immortal beyond the control of elected politicians, as popular wisdom (or fear) often suggests? Since Herbert Kaufman (1976) started to investigate this very question, a new strand of research has emerged to study the demography of public organizations, somewhat in line with population ecology approaches in the business literature. Scholars on both sides of the Atlantic studied the transformation of government by looking at the creation and termination of public organizations.

The studies on survival of public organizations agree on one aspect. Public organizations are far from perennial. Scholars arrive at the same conclusion regarding a diversity of public sector populations: over time, most public organizations perish. Their explanations vary, ranging from factors such as limited public resources, elections and turnovers, liabilities of newness, adolescence and obsolescence, and the institutional "hardwiring" of individual public organizations.

Studies on the demography of public organizations seldomly build on each other, as is customary for business administration studies in the population ecology realm. In particular, disagreement over definitions of organizational termination continues to divide the debate on organizational survival in the public sector. As if during an autopsy, different doctors arrive at different conclusions on the cause of death whereas a third one claims the patient has not died at all.

The following sections provide an overview of current insights, including the disagreements, on public organization survival. Two strands of research emerge: (1) institutionalist theories with a more "dichotomous" definition of termination and (2) those using public choice-oriented theories that consider a fine-grained range of political interventions on public organizations.

Politics and Legacies

Two Perspectives on Termination

What constitutes survival and termination of public organizations, really? In the field of business administration there seems to be little discussion on what is survival and what is not. Simply put, an organization is either in business or it is not. This lack of ambiguity in business literature allows for a dichotomous definition and "biological" metaphor in studying the mortality of government organizations, referring to the "mortality," i.e., "life" and "death," of organizations. The "population ecology" approach even sees competing organizations in a given area as a "species" that can be studied to explain firm mortality and organizational founding, as well as population growth and change. Ever since Kaufman (1976) adopted the biological metaphor 40 years ago this ecology idea has been applied increasingly on populations of public sector organizations as well.

Yet studying termination of public organizations defies such a strict, dichotomous definition of what constitutes survival. Being "dead" or "alive" in bureaucracy is not a dichotomy. Policies carried out by public organizations do not often come to a definite end. In fact, bureaucratic organizations and the policies they implement seem to undergo constant structural reform. This reform drive blurs the distinction between termination or continuation in a dressed up (or down) version.

The reorganizing capacity of political executives is what makes public administration and business administration such different fields. Public organizations do not only perish because other organizations outrivaled them in securing essential resources. Political executives can deliberately axe public agencies or deny them funding for ideological or electoral reasons. This difference matters for both termination definitions and their implications. In the study of the survival of public organizations, different perspectives on politics and administration have led to a considerable fragmentation of insights.

The Political Control Approach

The political control perspective implies that structural changes to public organizations are first and foremost political acts. The observer – from a political science background presumably – has an interest in studying political control over the structure of government, from the perspective of the principal. Each political act deserves similar attention, ranging from subtle name changes of organizations to fully fledged abolitions. From this perspective, biological metaphors and dichotomous definitions make no sense.

The political control approach tends to define most political interventions to public organizations as termination and (re-)creation. These changes not only reflect what happens to the public sector, above all they constitute important political acts representing political control over the public sector. It is important that no changes go by unnoticed because ignoring name changes and other events such as change of superior organization may mask important discontinuities. The subtle variety includes different "termination types," such as termination by change of name, form, level, or acquisition of activity.

In this perspective, even the least pervasive event (name change) reflects a significant act of political control over a public organization. For instance, the Dutch government decided to name the Air Traffic Security the Air Traffic Control Netherlands from 1998 onwards. "This name change signals an outward and transboundary approach to air traffic control. ATC has long been a domestic issue, but increasingly became a joint European and global responsibility – an evolution reflected in its name change. Though the agency continues as an organization this event can be interpreted as a termination of its previous form, and a start of a 'new' phase in a new form" (Kuipers et al. 2017). Seemingly small changes still represent a discontinuation of "key

structural features." The political control perspective identifies such a discontinuation or structural change as an "event," implying some form of termination.

The Institutional Legacy Approach

The contrasting approach implies that changes in the structure of government are the consequence of the fact that public organizations have their own interests (probably continuation). The public organization adapts to its environment and sees political interventions as a necessary evil that becomes part of the legacy to be carried into its future. The organizations themselves take center stage and their study – from a public administration or sociological institutional background – focuses on what organizations do to strike root, survive, and prosper. Biographical accounts of the rise and demise of particular organizations go hand in hand with life and death metaphors.

The institutional legacy approach would therefore advocate a more dichotomous definition of termination instead of the subtle variety discerned by the political control approach. Organizations only perish when they cease to exist in any form. All other events in the life of a public organization are forms of adaptation, perhaps even on its own initiative, in its struggle to survive. For instance, the Tennessee Valley Authority rose from an organization created to protect the region against flooding and soil erosion while at the same time exploit hydroelectric power to a nuclear power house 50 years down the road. The New York Port Authority born out of an interstate conflict about railroad freight rates was a seriously underfunded attempt to increase economic cooperation on both sides of the Hudson River. It turned into an engineering and transportation powerhouse, responsible for harbor and airport development, bus and truck terminals, in addition to building bridges and tunnels. Institutionalists focus on how public organizations form their mission from the moment of their inception and how the legacy that the organization built over time becomes the seeds of its eventual demise. The political control approach above would instead dissect the life of the TVA or the Port Authority in different durations for "different"

organizations, whereas students of institutional legacy emphasize the integrity of the institution, adapting over time.

Different Perspectives Relate to Different Research Designs and Methods

Institutional legacy arguments require comparative case studies instead of large N studies on populations. Case studies allow for a definition of termination that depends largely on the judgment of and substantiation by the researcher. The researcher builds an argument and in turn provides the reader with ample substance on each case heuristically to validate the argumentation. Yet even some large N studies take the organization and its institutional legacy as vantage point. They discern "maintenance," "succession," or organizational change categories as a go-between life and death. These studies use comparable definitions, but they do not explain events. Their distinction between terminating events and maintenance events does, in spite of their large number of observations, not allow for regression analysis and event history modeling to generate statistically robust explanations.

The political control studies employ large N statistical regressions. In order to find out which political factors influence survival, authors employ event-history analysis to explain "termination" events. The method does not tolerate categories between life and death, so most changes in the organizational structure are considered a termination event. Yet even studies that do statistically investigate the factors that affect survival use different definitions such that their findings have a different base, and as such they do not add up in a meta-analysis.

The more studies focus on organizational characteristics as a theoretical explanation for survival, the more they tend to use dichotomous termination definitions that imply stability. Those studies that see political control as the main survival explanation focus on events indicating organizational discontinuity. The next section presents an overview of the most important factors and findings from current studies to construct a model of organizational survival.

Organizational Survival in the Public Sector: Towards a Model

In spite of their disagreement on definitions of organizational termination, this section compares the results of existing studies on survival of public organizations. The result is a theoretical model of determinants of organizational survival and overview of common findings and disagreements in existing research. This section first introduces the hypotheses and ends with a summary of findings.

Three categories of factors seem to matter in the literature on survival of public organizations: (1) demographic explanations centering around the age of the organization, (2) design explanations implying that "birth characteristics" of organizations will influence future survival chances, and (3) contextual or functional explanations that reveal why some public organizations survive changes in their environment as opposed to others.

The perhaps most prominent and oldest factor of interest to students of organizational survival is the age of the organization. Common wisdom holds that organizations tend to survive infinitely after they reached maturity. Empirical studies demonstrated that an organization's survival chances do not monotonically increase with age, however. New organizations are particularly vulnerable because they have not been able to nest themselves and their routines sufficiently in their environment. In their early years, political volatility or growing pains may be fatal to the budding organization. Also, particular vulnerabilities can arise for the riper organization: obsolescence becomes a threat when an organization's functionality cannot keep up with changes in their environment (think of a steamboat inspection service, or a firm such as Kodak) or when their mission has been accomplished (fighting polio). If organizations' hazards increase both when they are very young and very mature, the survival chances of an organization would resemble an inverted U-curve.

In between, the hazards of the juvenile organization may increase. In its infant years, when its legislative support base has just been established and its proponents are still in office, the organization can develop relatively unharmed. More than a decade down the road, the organization has sufficiently secured its resources and support base to fend of competitors and opponents. However, in the in-between period, the organization's hazards rise because the protective shield of its creators may have diminished, and it becomes vulnerable to termination efforts by its opponents. Also, during the organization's adolescence, legislative actors have had time to learn about the organization and its accomplishments or performance (Carpenter and Lewis 2004). This learning may result in the increased likelihood of fatal critique and termination. Each age effect results in a different hypothesis related to survival.

H1. *A public organization is less likely to survive in the first five years after creation (liability of newness). After five years the termination chances of public organizations decrease.*

H2. *Public organizations are more likely to be terminated in their 'adolescent' years ($>5 < 10$).*

H3. *A public organization is likely to become obsolete at some point and thus faces increased hazards when it has reached a mature age (>30).*

Second, organizational survival in the public sector can be explained by looking at the agencies' "birth characteristics" or "DNA." Some organizations simply have a stronger design, they are "hardwired" for survival. Hardwiring theory especially dominates in political science, where organizations are seen as embodiments of political interests. Political science intrinsically links the acts of organizational change to legislative-executive decision-making. Instead of the invisible hand that weeds out some organizations in a population, public sector organizations sometimes face very visible opponents. Politically informed "attacks" on bureaucracy are predictable, so creators try to "hardwire" their organizational offspring into survival. The effects of institutional design result in the following hypotheses:

H4. *Organizations established by formal law have higher chances of survival than organizations established by decree.*

H5. *Organizations set up at arm's length of government have higher chances of survival than organizations that operate in the hierarchy of a ministerial department or executive office.*

Another product of intentional hard wiring is the organization's internal structure. Organizations' structural traits such as whether they are governed by a board or not (single administrators) could also have an impact on survival.

H6. *Organizations governed by a board are more likely to survive than organizations governed by a single administrator.*

An increasing number of termination studies have included the organizational "type" (advisory, regulatory, executive) as a factor of influence. Two types that stand out in the literature (advisory and regulatory versus the rest) are both included here. The distinct hypotheses reflect that the assumed influence on survival differs.

H7. *Advisory organizations have less likely to survive than other types of public organizations.*

H8. *Regulatory organizations have higher chances of survival than other types of public organizations.*

Some organizations are intended to be terminated from the start. Their "sunset clause" specifies when, or under what conditions, the organization will be abolished.

H9. *When organizations are created with a sunset clause, they are unlikely to survive that clause and mature into 'old age' (>average).*

Third, termination studies on public organizations usually control for political and economic indicators. The general expectation is that turnover is likely to affect survival of organizations in a negative way because incoming elects will probably attack the creations of their predecessors. In addition, a rightwing government will probably aim to downsize the public sector. Economic indicators also serve as an important control: when government revenues go down, it seems less inclined to spend resources on upholding public organizations. The opposite effect may also hold: recession makes incumbents unwilling to dismantle government organizations unlikely because in the short run this will increase unemployment.

H10. *Political turnover negatively affects survival of public organizations.*

H11. *A right wing (majority in) government negatively affects survival of public organizations.*

H12. *Incumbency of a political executive of another political color than the organization's creator (so-called 'unfriendly government') negatively affects survival of public organizations.*

H13. *When total government revenues decrease, the likelihood of survival of public organizations decreases as well.*

The next section provides an overview and discussion of the actual impact of these factors on organizational survival according to a set of recent studies.

Comparative Findings

Section three has not yet revealed how these factors fared in empirical analyses on the public sector. The table below presents the findings from the studies reviewed for each of the hypotheses above. Positive relation to survival is indicated by a "+" and a negative effect on survival by a "−." So a "+" for newness does not mean that the liability of newness is confirmed, but that newness has a positive effect on survival. A tested but inconsequential factor is indicated by an "x" and the "U" stands for nonlinear effects (for instance, insulation from presidential interference is a liability in the first 6 years of an

organization's lifespan but protects it in the long run; see Boin et al. 2010) (Table 1).

According to this overview, on average 54% of the cases perish during the period studied, about 1.5% of the studied population annually. This result officially debunks the myth of immortality. The varying time periods of the studies require us to temporalize the results. The comparably high percentages of 52% (Boin et al. 2016) and 58% (Greasley and Hanretty 2014) become very different termination rates when divided by the number of years of the studied period.

Nine factors seem to have a significant unidirectional effect on survival. Old age increases survival chances (H3), and so does a regulatory function (H8), and a firm legislative base (H4). Adolescence (H2) is a hazard, but different explanations rival for this effect. Advisory organizations (H7) are more likely to be terminated and, not surprisingly, this also goes for organizations set up with a sunset clause (H9). Political turnover most likely negatively impacts the survival of public organizations, because new political executives tend to reorganize the administration (H10). Unfriendly incumbencies (i.e., political executives of a different political ideology – H12) are likely to terminate the administrative agencies their political opponents previously created. Rightwing incumbencies (H11) often have negative effect on survival.

The incumbent government's ideology can also interact with other factors. Götz et al. (2015) point out that leftwing incumbents tend to be less likely to terminate administrative organizations, unless pressure for budgetary austerity increases (factors 11 and 13). Likewise, Greasley and Hanretty (2014) conclude that public organizations' termination hazards increase under rightwing governments in "normal" times (low to moderately high budget pressure). When public debt increases, organizations face higher termination risks under leftwing rule. Greasley and Hanretty additionally argue: "the effect of greater-than-average debt on agency termination is negative for very young agencies, and for older agencies, but positive for agencies in their third to seventh years" (p. 17). So leftwing incumbencies under economic strain are most likely to target adolescent agencies for termination (which fits with our hypothesis 2).

Surprisingly, the effects of economic downturns also point in other directions. Carpenter and Lewis (2004) challenge conventional wisdom with their finding that budgetary pressure decreases survival chances for public organizations (H13). In fact, their budgetary surpluses increase the hazards, and deficits make terminations less likely. The short-term cost of organizational termination would make such decisions unfavorable in times of austerity (Carpenter and Lewis 2004, p. 222). By contrast, James et al. (2015) found that budgetary pressure increases termination hazards whereas Park (2013) and Boin et al. (2016) tested the same factor but found no significant effects.

Insulation from executive interference (arm's length status – H5) can make organizations more likely to survive than those created in proximity to the President, but not all studies agree (Lewis 2004 vs. Boin et al. 2010). Disagreement also exists regarding newness (H1): being green can both help the organization to survive and prove to be a liability (see Table 1).

Conclusion and Future Research

Explanations for the survival of public organizations abound. This chapter offered an assessment of each potential factor by comparing different research findings. The factors that were confirmed in several studies could together form an integrated model of organizational survival in the public sector. Such an integrated model would predict that regulatory tasks, creation by law, and being older than 12 years makes organizations most likely to survive, but by no means hazard-free. In any case, hazards for public organizations increase when political winds change and new incumbents enter office. Rightwing executives may be more likely to terminate public organizations in normal times but beware of the leftwing executives under budgetary constraints. Such an integrated model could best be tested on large N datasets by using event-history analysis. Revealing underlying mechanisms, discovering

Organizational Demography, Table 1 Overview and comparison of findings.

	MacCarthaigh 2014	Boin et al. 2010	Boin et al. 2016	Park 2013	O'Leary 2015	Bertelli and Sinclair 2016	Carpenter and Lewis 2004	Lewis 2004	Götz et al. 2015	Greasly and Hanretty 2014	James et al. 2015
1. Newness	−	−	x	x	−	−	+			+	
2. Adolescence			−	x			−			−	
3. Old age	+	+	+	x	+	+				+	
4. Law based	x	x	+	x			+	+			
5. Arm's length	U	U					+	+		+	
6. Board	U	U	x					−			
7. Advisory organization					−	x				−	
8. Regulatory organization	x	x						+		+	+
9. Sunset clause	x	x	−					−			
10. Political turnover	−	−	x	−	x	−	−	−			x
11. Rightwing incumbency	x	x	x				−	x	−	U	
12. Unfriendly incumbency	x	x	x		x					x	−
13. Budgetary pressure/debt			x	x			+		−	U	−
% terminated	37[a]	75	52	39	39	49	57	59	58	58	72
% terminated annually	0.4	1.0	0.7	2.3	NA	NA	1.1	1.2	NA	2.5	3.1

[a]Derived through personal correspondence with author; NA means exact figures are not available

new variables, and explaining outliers would benefit from a case-oriented study, as advocated within the institutional legacy approach.

To enrich future discussions on organizational survival and transformation of the public sector, it seems imperative to abandon the binary definition of organizational termination. Instead, a focus on "transitions" would help to build on the diversity of existing research and allow for more analytical leverage. The word "termination" implies a definite "end" of a period in which an organization took on a particular form. Meanwhile the organization itself did not end. The preferred, more neutral term "transitions" refers to beginnings and ends of phases through which organizations evolve. Such transitions are both dependent variables in their own right and explanatory factors for survival – a great number of sudden transitions could be a prelude to full termination, or the total absence of transitions could indicate an ultimately fatal condition of rigidity. A sequence of transitions could reflect a pattern of staged adaptation to changing resource levels (Levine et al. 1981). The total sum of transitions of individual organizational units reflects a transformation of government.

Transitions pertain to all the structural changes to the organization that can be measured consistently and reliably over time, such as changes to the organization's name, superior organization, hierarchical level, status as staff or line unit, structural autonomy by law, as well as mergers, splits, and abolishments. This approach allows building both on existing datasets for event-history analysis and on studies that use a dichotomous definition of survival. Coding all detailed changes as events allows for multivariate regression analyses and statistical explanations on survival in the public sector. The compatibility to institutional legacy studies is enabled by the possibility to discard more subtle transitions such as name changes in the dataset in order to study long institutional durations only interrupted by more definite passings such as mergers or splits.

Important steps have been made in studying the transformations of public organizations individually and the state in total, since Kaufman started his study on organizational mortality in 1976. However, today many studies on survival in the public sector focus only on independent agencies, in majoritarian political systems (cf. Park 2013; Greasly and Hanretty 2014; James et al. 2015; Bertelli and Sinclair 2016; Boin et al. 2016). Rich harvest is waiting in a demographic study of both autonomous agencies and bureaus within national ministries in continental Europe. Such populations would allow for systemic comparisons on the vulnerability of autonomous versus embedded public organizations and the effects of institutional design between majoritarian and consensual systems. Additionally, policy preferences in coalition governments probably affect administrative reform and organizational termination in a different way than in single party governments. Building on findings of Götz et al. (2015) and Greasley and Hanretty (2014), future studies could probe into the effects of political ideology under different circumstances or for different organizations. There is much to gain from a study on the relation between policy agendas (the Comparative Agendas project), policy preferences (the Manifestos data on electoral programs), and the structure of government in different policy areas.

Empirical research has now established that public organizations do perish and that organizational design can serve as a shield against termination hazards. Future studies need to probe deeper into how specific political power plays and particular policy preferences impact the structure of government.

Cross-References