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It's about time! Temporal dynamics and longitudinal research designs in public administration

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Abstract

Many of the fundamental research questions in public administration relate to individual- or organization-level temporal dynamics, including the impact of public sector reforms, (in)stability of public policies and organizations, development of public service motivation, or the workplace socialization of public employees. However, theoretical, methodological, and empirical public administration scholarship continues to take time and temporal dynamics insufficiently seriously. This constitutes a major shortcoming within the profession and implies that we are yet to unlock the transformative potential of longitudinal research. Building on the recent development of novel research infrastructures that can support the study of temporal dynamics of—and within—public organizations, this Symposium pushes for a "longitudinal turn" in the study of public administration. We maintain that more concerted efforts to apply a temporal lens to our research endeavors are critical to theorize, empirically assess, and understand public administrations as well as the bureaucrats employed within them.

INTRODUCTION

Two decades ago, Baumgartner and Jones (2002: p. 6) lamented that "one of the truly great failings of the policy sciences has been the inability to produce reliable longitudinal studies". Contemporaneously, Gill and Meier (2000: p. 157) argued that public administration research had "fallen notably behind research in related fields in terms of methodological sophistication" particularly with respect to the use of time-series analyses. Twenty years later, descriptive case studies and cross-sectional research designs continue to dominate the study of public administration (Pandey, 2017; Ritz et al., 2016; Stritch, 2017). While it is not uncommon for research papers to conclude with a call for applying a longitudinal perspective to the

phenomenon under analysis, this rarely occurs in practice. Moreover, longitudinal research designs and methodological approaches are still not uniformly established within the canon of public administration research methods. The *Handbook of Research Methods in Public Administration, Management and Policy* (Vigoda-Gadot & Vishdi, 2020) dedicates only one chapter to one specific longitudinal research approach (i.e., difference-in-differences models), whereas Van Thiel's (2022) *Research Methods in Public Administration and Public Management* engages in a broader discussion of the utility of cohort, panel, and trend studies.[1]

This observation is particularly disconcerting since many fundamental public administration research questions relate to individual- or organization-level temporal dynamics, or involve causality as an issue of temporal ordering. One can think, for example, about the impact of public sector reforms on organizational outputs and performance (Christensen & Lægreid, 2007; Levine, 1978, 1979; Wynen et al., 2019), the development of public service motivation or organizational citizenship behavior (Chen et al., 2023; Kim, 2021; Miller-Mor-Attias & Vigoda-Gadot, 2022), the socialization of public sector

employees (Moyson et al., 2018; Murdoch et al., 2019), the life cycle of public organizations (MacCarthaigh et al., 2012), or the short- and long-term impact of representative bureaucracies on public policies (Ding et al., 2021; Gershenson et al., 2022). The persistent failure in much public administration research to take time and temporal dynamics seriously thus constitutes a major hindrance to the development of the profession. It "abstracts away from the temporal flow of much of [public] organizational life" (Langley et al., 2013: p. 4), and hampers "investigations into substantive questions of interest to practitioners and academics" (Gill & Meier, 2000: p. 157).

Clearly, there are a number of reasons for the slow progress of public administration scholarship from its static, cross-sectional focus toward a more dynamic, longitudinal approach. Compared to most cross-sectional work, establishing longitudinal datasets generally requires a substantial investment of time and resources. The incentives and demands of modern academic careers, however, do little to reward longer-term approaches to data-gathering and infrastructure development. There are considerable career risks involved for researchers who invest in projects that can take years before useable data (and publications) emerge. Moreover, resources are limited and access to funding has long been a major hindrance for public administration scholars, thus constraining the possibilities to develop necessary research infrastructures (Gill & Meier, 2000). Even when time and resources are not the main obstacle, other challenges remain. At a conceptual level, for instance, what policy is and what defines a public organization may change over time, making any basis for comparison more arduous. Furthermore, developing longitudinal datasets at the individual level faces complications due to attrition (as employees retire or move) and lack of repeated and/or sufficiently frequent access, among others (Stritch, 2017).

Notwithstanding these constraints, recent years have witnessed the creation of several new research infrastructures to support longitudinal perspectives on public policy, public organizations, and bureaucrats. Building on these developments, this Symposium challenges the persistent dominance of the static status-quo. While there have been singular attempts to bring temporal concepts into play (which we review below), we argue that now is the time to engage in more concerted efforts to address this long-neglected aspect of our discipline and award more attention to the transformative potential of longitudinal research. We also wish to inspire colleagues to collaborate on building research infrastructures that can facilitate scientific inquiry into the longitudinal dimensions of public administration(s). Static approaches to the field can obviously offer important insights, but they are inherently unable to model dynamic relationships, account for time dependence, or address time-related factors that may be a causal factor of interest in their own right. Hence, it is critical to apply a temporal lens to research endeavors in order to advance our ability

to theorize, empirically assess, and understand public administrations, their evolution and reform.

In the remainder of this introduction, we first define and discuss the key concepts of time, temporal dynamics, and longitudinal approaches. Then, we review extant strands of longitudinal research in public administration, before turning attention to the resources and research infrastructures required for a longitudinal turn in public administration scholarship. We thereby also highlight what we can (and cannot) learn in this direction from neighboring disciplines. Finally, we offer a brief preview of the contributions included in this Symposium.

KEY CONCEPTS: TIME, TEMPORAL DYNAMICS, AND LONGITUDINAL APPROACHES

We start by clarifying the three central concepts of time, temporal dynamics, and longitudinal approaches. While each of these has been used extensively in academic publications, different scholars rely on distinct definitions, interpretations, or understandings. Hence, to avoid confusion, a common understanding is required.

We follow Ancona et al. (2001: p. 513) in defining the concept of time as "a non-spatial continuum in which events occur in apparently irreversible succession from the past through the present to the future." While this continuum is often viewed as involving a linear progression with time moving "forward" (i.e., in one direction), this need not necessarily be the case. Public budgets, for instance, follow a well-defined set of stages every year (Rubin & Bartle, 2023), the development of legislation typically requires passing a pre-set series of stages (Willems & Beyers, 2023), while the "policy cycle" describes the various stages of public policy development (Howlett et al., 2009). Similarly, many phenomena—including the evolution of public sector organizations—follow a developmental pattern across their "life cycle" (MacCarthaigh et al., 2012). Our conceptualization of time allows for such non-linear progressions. Bearing in mind the Greek distinction between *Chronos* (formal time) and *Kairos* (events), it also allows for time to be conceptualized as event-based (Ancona et al., 2001). One could, for instance, think of happenings including elections, pandemics, earthquakes, or terror attacks as event-based time in which specific occurrences repeat in a predictable (i.e., regular) or unpredictable (irregular) pattern.[2]

When we think about time as defined above, we can start to develop a "temporal" understanding of public administrations, their staff, and their actions (Ancona et al., 2001; Fleischer, 2013; Goetz, 2014; Goetz & Meyer-Sahling, 2009). For instance, mapping activities and actions onto the time continuum naturally brings up temporal concepts such as the scheduling of events at certain points in time (e.g., during agenda-setting), the allocation of time to activities (e.g., short versus long deadlines), as

well as activities' frequency, rate of incidence, duration, and so on.[3] When we allow for change to take place over time, even more temporal concepts come into play—such as the rate of change (e.g., rapid or gradual), its timing (e.g., immediate or delayed), and the potential for (a)synchronicity (i.e., multiple events occurring at the same time).[4] With such concepts in hand, we can also dig deeper into the temporal relationships involved—such as between an event occurring at a particular point in time and subsequent behavioral outcomes, including bureaucratic representation, interpersonal trust, or organizational legitimacy (Methot et al., 2017; Murdoch et al., 2022).

This discussion brings us to our second concept, namely, temporal dynamics. We define temporal dynamics as the nature of the development in the value of a given variable over time, that is, the specification of its time-path. This goes beyond the concept of change, which "merely" refers to the process of value A turning into value B over time without specifying the characteristics of this development. Although documenting change is often of relevance in and of itself, a focus on temporal dynamics requires researchers to give due attention to when and how change occurs (Ancona et al., 2001; Methot et al., 2017; Murdoch et al., 2022). First, one should account for the rate of change, which can be fast, slow, linear, exponential, or stepwise. Second, one should establish the magnitude of change observed at different points in time, which may include distinguishing between the short- and long-term impacts of an event or intervention as well as the assessment of potential anticipation effects. Finally, one should appraise the presence and length of leads (such as pre-trends) and lags (i.e., the amount of time between events and the onset of its observable impact on some outcome of interest).

Finally, taking time seriously from a conceptual and theoretical perspective requires taking it equally seriously from a methodological and empirical perspective. This brings us to the third concept, namely longitudinal research designs. As mentioned, this concept has been stretched to cover a wide range of approaches. Following Menard (1991), we impose three key features. First, the data must cover *two or more periods*. Second, the data must measure the *same concepts* at multiple points in time (e.g., public service motivation for individual i at times t and $t + x$). Third, the central intention of the analysis should be to use these data to *compare between and/or among the periods*. This by construction excludes studies linking concept A at time t to concept B at time $t + x$ (e.g., Chen et al., 2023; Kim, 2021). Although such designs impose a temporal ordering on the data collection and analysis, they cannot capture *changes* and temporal *dynamics* in a given outcome of interest over time.

Note that these three basic criteria do not specify the *unit of observation*. In a strict interpretation, one might argue that longitudinal research designs require studying the *exact same set of cases* from one period to the next (whether individual employees, divisions within a

ministry, local authorities, or countries). This would rule out, for instance, repeated cross-sectional survey data (Fernandez et al., 2015; Yackee & Yackee, 2021) or so-called "a posteriori" comparisons (de Sá e Silva & de Oliveira, 2023; Montero & Baiocchi, 2022) since different samples are studied at different points in time. It would likewise exclude "pseudo-panels," which aggregate individuals within groups to calculate intra-group means for comparison over time (Bertelli et al., 2015; Boon et al., 2023; Fernandez et al., 2015; Jensen et al., 2018; Oberfield, 2014). Pseudo-panels generally do not refer to the *exact* same set of cases due to potential shifts in each group's composition across survey waves. Although we do not categorically rule pseudo-panels out from our conception of longitudinal research designs, we maintain that two critical conditions should be met to enable valid inferences when using pseudo-panels to study organization-level temporal dynamics. First, the groups must be based on relevant, clearly defined, and stable organizational units (e.g., ministries, departments, or local authorities). Second, the data employed to create the pseudo-panels should be representative *at this relevant organizational level*—as is the case, for instance, with the stratified random samples of the US Federal Employee Viewpoint Survey (Office of Personnel Management, 2020).

Longitudinal public administration scholarship: An overview

Of course, it would be misleading to suggest that public administration and policy scholars do not engage with issues of time and temporality. In fact, considerable literature studies in public administration and public management look at macrolevel temporal dynamics—including studies on the historical development of public administration and reform traditions (Hood, 1998; Painter & Peters, 2010), the long-standing practice of program-evaluation studies (Bingham & Bowen, 1994), and the vast literature looking into policy diffusion across time and space (de Sá e Silva & de Oliveira, 2023; Shipan & Volden, 2012). Nonetheless, analyses of changes over time and temporal dynamics at the micro and meso levels—that is, taking individual public bureaucrats and formal public sector organizations, respectively, as the unit of analysis—are considerably less common.

A decade ago, for instance, MacCarthaigh et al. (2012: p. 846) noted that "the academic literature on organizational change in the public sector offers several ideas and perspectives for explaining the birth, survival, and death of public organizations. Nevertheless, there remains considerable room for supporting these ideas with analyses of actual longitudinal continuity and change." Recent work has sought to close this gap, but witnessed a particular flourishing of work on organizational termination (Greasley & Hanretty, 2016; James et al., 2016; Park, 2013;

Witteloostuijn et al., 2018; for an important exception, see Peters & Hogwood, 1988). Naturally, organizational termination constitutes only the end point of the organizational life cycle. A narrow focus on this final stage implies that much remains unknown about, for instance, the birth of public organizations at specific points in time or their growth/decline and reform across their life span. This is slowly changing. Lichtmannegger and Bach (2023), for instance, analyze organizational reforms within a single (Austrian) Ministry over the period 1986–2015. In this Symposium, Kleizen and MacCarthaigh (2023) contribute to this development by studying the determinants of intermediary life-cycle events for 634 Irish public sector organizations covering the 1922–2022 period.

Such dynamic research endeavors at the organizational level often stand or fall with access to detailed historical information. The *Structure and Organization of Governments* project (SOG-PRO; www.sog-pro.eu) clearly illustrates the potential of such data collection efforts. SOG-PRO brought together detailed annual information about structural developments in the central governments of France, Germany, the Netherlands, and the UK between 1980 and 2015. This triggered a flurry of longitudinal research into, for instance, the association between political turnover and ministerial portfolio name changes (Yesilkagit et al., 2022), the scale of diversity and innovation within ministries (Bertels & Schulze-Gabrechten, 2021), or the autonomy of ministers to engage in such reshaping (Kuipers et al., 2021). Fleischer et al. (2023) in this Symposium contribute to this research stream by looking into the political factors affecting such structural developments.

At the individual public employee level, panel data and longitudinal research designs have most frequently been used to study the relationship between employment in the public sector and public service motivation. This literature illustrates that the direction of causality can run both ways. That is, public service motivation may induce self-selection effects to enter public employment (Georgellis et al., 2011; Kjeldsen & Jacobsen, 2013). Yet, the specificities of public sector employment may also affect the development of public service motivation over time (Brænder & Andersen, 2013; Georgellis & Tabvuma, 2010; Jensen et al., 2020; Kjeldsen & Jacobsen, 2013). A second branch of individual-level longitudinal research relies on relatively short-term panel datasets from field, survey, or natural experiments to study the impact on public employees of leadership styles (Bro & Jensen, 2020; Jakobsen et al., 2023; Jensen et al., 2019; Nielsen et al., 2019) or major reforms within public organizations (Geys et al., 2020; Geys, Connolly, et al., 2023; Geys, Lægreid, et al., 2023; Murdoch et al., 2019). While well-designed (quasi-)experimental studies allow for strong causal inferences with regard to the presence/absence of change over time, their short time periods naturally come with limitations from the perspective of temporal dynamics. For instance, they

generally do not allow assessment of the speed of change, appraising short- versus long-term impacts, or verifying the presence and length of any impact lags.

Finally, and contributing to the theory of representative bureaucracy, scholars of education have recently started using short panel datasets to study whether and when exposure to same-race teachers is "beneficial to underrepresented minority students" (Gershenson et al., 2022: p. 3). While generating useful insights, such studies can usually only observe student outcomes at specific points in time, which is likely to underestimate representative bureaucracy effects for a number of reasons. It not only concentrates on short-term effects, but also misses any residual impact from past same-race teachers for a given student, potential role model effects (from other teachers not teaching the class), policy changes implemented to remove same-race biases, and contagion effects between teachers of different races (or genders).[5]

From theory to practice: Resources for longitudinal research

It is clear that applying a time dimension to public administration questions requires the availability of longitudinal data.[6] Within political science, the development of such datasets has a long history. As a result, the discipline now has access to a wide range of databases that capture various aspects of political systems and those working and living within them for often very substantial numbers of years and countries. Examples include the WhoGov (Nyrup & Bramwell, 2020; https://politicscentre.nuffield.ox.ac.uk/whogov-dataset) and Who Governs? (Bértoa & Enyedi, 2021; https://whogoverns.eu) databases. They cover detailed information about cabinet members in 177 countries from 1966 to 2016, and the composition of European governments from 1948 to 2020, respectively. Similarly, Skaaning et al. (2015) supply a lexical index of electoral democracy in independent states between 1800 and 2013 (https://doi.org/10.7910/DVN/29106), while the Quality of Government dataset documents government quality and transparency since the mid-1980s (Teorell et al., 2023; https://www.gu.se/en/quality-government/qog-data). The Correlates of War database brings together data on intra- and interstate conflicts dating back to 1816 (Sarkees & Wayman, 2010; https://correlatesofwar.org). Most countries also regularly field National Election Studies containing detailed questions about inhabitants' political behaviors and attitudes—sometimes containing overlapping panels for subsets of individual respondents in consecutive survey waves (Geys et al., 2021, 2022).

Moving to a lower level of aggregation, *cohort studies* that track the development of subpopulations over time have achieved considerable status in, for instance, political science, sociology, and demography. One early example is Wisconsin Longitudinal Study (WLS), which has

been following a random sample of 10,317 high-school graduates (and parts of their families) at irregular intervals since 1957 (https://wls.wisc.edu). This study inspired, for instance, the Michigan Youth-Parent Socialization Panel Study—which has followed 1,669 high-school seniors and their parents between 1965 and 1997—and more recent comparative birth cohort studies (e.g., Growing up in Digital Europe; https://www.eurocohort.eu). *Household panel surveys* have also emerged, which track a set of households—and the individuals within them—over often considerable lengths of time. Examples include the British Household Panel Study (BHPS), the European Community Household Panel (ECHP), and the German Socio-Economic Panel (SOEP). Recently, the Comparative Panel File project harmonized data from seven countries' household panel surveys (Australia, Germany, Russia, South Korea, Switzerland, the UK, and the USA), thereby capturing "2.7 million observations from 360,000 respondents, covering the period from 1968 to 2019 and up to 40 panel waves per respondent" (Turek et al., 2021: p. 505). Furthermore, in the context of ever-greater creation and retention of administrative data by governments, *record linkage studies*—which involve linking multiple administrative records for the same individual over time—have become popular means to study individual-level behavior in a number of disciplines (Bratsberg et al., 2022; Briggs et al., 2021; Fiva et al., 2021; Grytten et al., 2013).

Public administration scholarship has long struggled to establish a similar longitudinal research infrastructure. In recent years, however, numerous initiatives have started to develop. At the organizational level, several datasets capture the evolution of administrative systems and the organizations within them. Seeking to develop common classifications for organizational life cycles in the public sector at national level, MacCarthaigh and Roness (2012) published a special issue on the theme of "Mapping Public Sector Organizations." Contributions included studies of Ireland from 1922 to 2010 (MacCarthaigh, 2012), Norway from 1947 to 2011 (Rolland & Roness, 2012), Estonia from 1990 to 2010 (Sarapuu, 2012), Lithuania from 1990 to 2010 (Nakrošis & Budraitis, 2012), and Hungary from 2002 to 2009 (Hajnal, 2012). In similar vein, the SOG-PRO project mentioned previously maps and analyzes structural changes in the central governments of France, Germany, the Netherlands, and the UK annually between 1980 and 2015. Task-focused databases have also been developed, such as Jordana et al.'s (2011) database of global regulatory agencies (48 countries and 15 sectors) between 1966 and 2007.

At the individual level, however, longitudinal databases on public employees remain uncommon (beyond the administrative data collected by governments).[7] Admittedly, individual-level surveys of the attitudes, views, and experiences of civil servants are conducted in many countries—often capturing the same concepts from one year to the next over long periods of time. Examples

include the American State Administrators Project (1964–2018; Yackee & Yackee, 2021), US Federal Employee Viewpoint Survey (2002–2021; Fernandez et al., 2015), Norwegian Administration Surveys (1976–2016; Christensen et al., 2018), German Political-Administrative Elite survey (2005–2021; Ebinger et al., 2022), and three large-scale surveys among European Commission staff in 2008, 2014, and 2018 (Kassim et al., 2013; Murdoch et al., 2022). Annual or multi-annual surveys among all civil service staff members have also been conducted in, for instance, Australia (Australian Public Service Employee Census), Canada (Canada Public Service Employee Survey), New Zealand (Te Taunaki Public Service Census), and the UK (UK Civil Service People Survey). These surveys are usually designed as repeated cross-sections without unique identifiers for individual respondents. Fortunately, recent methodological contributions have made it possible to extract individual-level panel datasets from some of these datasets for at least a subset of the surveyed respondents (Geys, 2023; Murdoch et al., 2019).

Our survey of these resources in this introduction to the Symposium is not designed to be comprehensive, and there are undoubtedly other (trans)national projects underway (including in other languages) that engage meaningfully with temporal dynamics and longitudinal data. These novel datasets and methodological tools offer exciting new possibilities for researchers to study *both* public sector organizations *and* their personnel from a longitudinal perspective. The contributions to this Symposium illustrate how these innovative resources and research infrastructures, as well as a temporal mindset at the conceptual, theoretical, methodological, and empirical levels, can create a fertile breeding ground for a "longitudinal turn" in the study of public administration.

Overview of contributions to the Symposium

In this final section, we briefly introduce the seven contributions included in this Symposium. We structured these articles to move from the macro level (i.e., public authorities), via the meso level (i.e., public organizations), to the micro level (i.e., staff in public organizations). This intends to illustrate both the breadth and depth of the potential afforded by research endeavors applying a temporal lens in public administration scholarship.

Starting at the macro level, Elston et al. (2023) study the implications of recent developments toward increased interjurisdictional cooperation using a panel dataset at the level of English local councils. Exploiting the staggered rollout of cooperation agreements across England over time, they apply a stacked difference-in-differences estimator to 11 years of performance data on council-level tax administrations. This provides a unique opportunity to compare how these administrations' collection rates and costs developed before and after entering into a cooperation agreement. The main

findings show that collaboration caused a *reduction* in the tax collection rate and does *not* lower public expenditures on this public service. They attribute this surprising result to a lack of interdependence in the provision of this particular public service, implying there was no "problem" for interjurisdictional cooperation to "solve." This observation strongly suggests that jumping on the latest reform wave just because "everyone else is doing it" may generate at best limited benefits and could carry important risks for the involved public authorities.

Moving to the meso level, Kleizen and MacCarthaigh (2023) contribute to the growing literature on the causes and consequences of major events in the life cycle of public organizations. In contrast to the majority of previous research conducted in this field, they delve into the determinants of *both* intermediary *and* termination life-cycle events linked to shifts in the tasks, policy domain, legal form, and formal structure of public organizations. This is feasible due to an in-depth mapping exercise that allowed constructing timelines of the entire life cycle of over 600 state agencies in the Irish national public administration over the 1922–2021 period. Applying survival analysis to this unique new dataset, a first major finding is that an organizational reform today could contribute to additional reforms in the future. This is consistent with theoretical predictions that public organizations may become "stuck" in persistent reform cycles (Brunsson, 2006; Pollitt, 2007), which public sector managers should take into account *before* starting an organizational reform program. Additionally, their contribution extends prior work on the determinants of reform by suggesting that factors such as political turnover and legal form can also affect a public organization's likelihood of facing reform.

Fleischer et al. (2023) are likewise interested in when and how the organizational structure of public sector organizations changes. In a similar vein to Kleizen and MacCarthaigh (2023), their analysis builds on an in-depth mapping of the timelines of ministerial units in four European democracies over the 1980–2013 period. However, their empirical analysis takes a complementary approach to that of Kleizen and MacCarthaigh (2023) by focusing on key political determinants of the *duration* of ministerial departments. The results show that cabinets' ideological turnover and extremism as well as the level of ideological polarization in the national parliament significantly affect the probability that ministerial departments are terminated (or, at least, very comprehensively reformed). Crucially, however, their findings also highlight that the exact definition and operationalization of the "structural duration" under investigation can matter for the inferences drawn from the analysis. This highlights that future scholars should pay special care in defining, measuring, and coding organizational changes (or lack thereof) in order to draw valid and robust inferences.

Boon et al. (2023) also work at the organizational level, but their analysis employs *individual*-level data from repeated cross-sectional surveys aggregated up to the level of the public *organizations* within which these individuals work (in this case, US agencies). The creation of this pseudo-panel (see Bertelli et al., 2015) allows them to take an explicitly dynamic approach to the study of how reputational threats affect the rigidity of public organizations (defined as a work environment that "discourages employee involvement, innovation, creativity, flexibility and empowerment"; Boon et al., 2023: p. 17). Using dynamic panel data models over the 1998–2010 time period, the main results illustrate that negative reputation shocks as well as increased inter-temporal variability in organizational reputations are linked to statistically significantly higher levels of organizational rigidity. This finding reveals the risk of a vicious cycle whereby public sector managers respond to negative environments by increasing the level of formalization in their work environment. Unfortunately, however, these actions may well work to enhance the negative perception of an inflexible, unresponsive, and "fossilized" public sector (Barton, 1979; Moynihan & Ingraham, 2010; Rainey & Steinbauer, 1999).

Moving down to the micro level, Geys (2023) presents a novel methodology to extract individual-level panel datasets from repeated cross-sectional surveys among the same respondent pool (first applied in Murdoch et al., 2019). The approach builds on the fact that most sociodemographic background characteristics of individuals do not change over time (such as birthplace), change at a fixed pace (such as aging), or reflect permanent elements in a person's life history (such as career history). Geys (2023) illustrates when and how specific combinations of such characteristics can be used to reveal the repeated presence of the same respondent(s) across repeated surveys among the same target population. This approach offers two key benefits to researchers and practitioners. On the one hand, the resulting panel datasets provide the opportunity to engage in longitudinal analyses *at the individual level*, which extends the possible insights that can be gained from the original datasets. On the other hand, the approach offers a tool that can help researchers and practitioners make decisions regarding any re-coding and/or withholding of specific information in order to maintain respondent anonymity while creating Public Release datasets.

Geys, Lægreid et al. (2023) apply the methodological approach mentioned above to the Norwegian Administration Surveys fielded in 2006 and 2016 (Christensen et al., 2018) in order to study the impact on Norwegian civil servants of the July 22, 2011 terrorist attack in Oslo. The dataset covers 186 individuals observed *before* and *after* this terrorist event and thus captures their perceptions of key aspects of their work environment at both points in time. The main findings from a two-group, two-period difference-in-differences analysis illustrate that having been in very close proximity to a terror attack strengthens the internal cohesion of the involved public organizations, while also increasing the attention the civil servants under attack award to the signals of their

political leaders. The authors interpret this as evidence that external threats to one's workplace act as a bonding device for the affected employees, but in a public sector setting can also lead politicians to gain more influence over the decision-making of civil servants. The latter can have particularly important implications for democratic governance.

Finally, Yackee (2023) evaluates whether and how ideological extremism in the political environment of public organizations affects the desire to grow and expand among the leaders of these organizations. Her analysis is based on a unique combination of 11 surveys fielded between 1964 and 2018 among all US state agency leaders (N > 10,000 respondents). This allows the empirical analysis to exploit extensive variation across both space and time in US state agencies' ideological environment. A first finding from the analysis is consistent with Niskanen's (1971) view of budget-maximizing bureaucrats and shows that US agency leaders tend to express a strong preference for their agency to expand in terms of its programs and services. Crucially, however, heightened political extremism works to curb these inherent growth aspirations, particularly when the presence of a divided government at the state level creates additional uncertainty about the position of elected leaders. Taken together, the results suggest a connection between the extremism of political leaders and the restraint of public officials that—in the absence of an explicitly longitudinal approach to this question—has heretofore remained unrecognized.

ENDNOTES

[1] The concept of longitudinal research is a broad church with a myriad of understandings permeating the literature. We return in detail to this conceptual discussion in the next section.

[2] One can also differentiate between "objective time" as an objectively determined order and "subjective time" as expressed in individual or organizational perceptions and expectations (Ancona et al., 2001; Shipp & Jansen, 2021).

[3] This links, for instance, to Kingdon's (1995) "windows of opportunity" concept as well as the importance of "time tactics" raised by Pollitt (2008). The latter concept refers to the strategic use of time by involved actors, such as politicians engaging in delaying tactics (e.g., when setting up a committee to investigate a certain matter) or speeding up decision processes (e.g., by temporarily suspending pre-existing rules).

[4] This relates to several well-worn concepts taught within the policy sciences to explain change, or its absence, over time. Alongside Baumgartner and Jones' (1993) "punctuated equilibrium" lie the much-cited concepts of "paradigm shifts" (Hall, 1993) and "path dependency" (Pierson, 2000). In effect, as illustrated by Kickert and van der Meer (2011), the historical institutionalist approach and its associated concepts of "critical junctures" and "path dependence" have been a source of considerable inspiration in public administration research. Yet, the temporal dimension that is inherent to them is rarely identified.

[5] We are grateful to Ken Meier for pointing this literature and these insights out to us.

[6] Naturally, these data—once available—should be analyzed using appropriate methods. We do not discuss such methodological tools here, but refer the interested reader to, for instance, Gill and Meier (2000), Zhu (2012), van Thiel (2022), and Boon et al. (2023) as useful starting points.

[7] One interesting recent exception concerns Houtgraaf's (2023) longitudinal digital diary study, which collected biweekly information on the "work-related creative experiences" of 141 public employees across a six-month period.

REFERENCES

Ancona, Deborah, Gerardo Okhuysen, and Leslie Perlow. 2001. "Taking Time to Integrate Temporal Research." *Academy of Management Review* 26(4): 512–529.

Barton, Allen. 1979. "A Diagnosis of Bureaucratic Maladies." *American Behavioral Scientist* 22(5): 483–492.

Baumgartner, Frank, and Bryan Jones. 1993. *Agendas and Instability in American Politics*. Chicago: University of Chicago Press.

Baumgartner, Frank, and Bryan Jones. 2002. *Policy Dynamics*. Chicago: University of Chicago Press.

Bertelli, Anthony, Dyana Mason, Jennifer Connolly, and David Gastwirth. 2015. "Measuring Agency Attributes with Attitudes across Time: A Method and Examples Using Large-Scale Federal Surveys." *Journal of Public Administration Research and Theory* 25: 513–544.

Bertels, Jana, and Lena Schulze-Gabrechten. 2021. "Mapping the Black Box of Intraministerial Organization: An Analytical Approach to Explore Structural Diversity below the Portfolio Level." *Governance* 34(1): 171–189.

Bértoa, Fernando, and Zsolt Enyedi. 2021. "Who Governs Europe? A New Historical Dataset on Governments and Party Systems Since 1848." *European Political Science* 21(1): 150–164.

Bingham, Richard, and William Bowen. 1994. "Mainstream Public Administration over Time: A Topical Content Analysis of Public Administration Review." *Public Administration Review* 54(2): 204–8.

Boon, Jan, Jan Wynen, and Koen Verhoest. 2023. "Do Reputational Threats Influence the Rigidity of US Agencies? A Dynamic Panel Data Approach." *Public Administration Review* 83(6): 1798–812.

Brænder, Morten, and Lotte Bøgh Andersen. 2013. "Does Deployment to War Affect Public Service Motivation? A Panel Study of Soldiers before and after their Service in Afghanistan." *Public Administration Review* 73(3): 466–477.

Bratsberg, Bernt, Christopher Dawes, Andreas Kotsadam, Karl-Oskar Lindgren, Richard Öhrvall, Sven Oskarsson, and Oddbjørn Raaum. 2022. "Birth Order and Voter Turnout." *British Journal of Political Science* 52(1): 475–482.

Briggs, Joseph, David Cesarini, Erik Lindqvist, and Robert Östling. 2021. "Windfall Gains and Stock Market Participation." *Journal of Financial Economics* 139(1): 57–83.

Bro, Louise Ladegaard, and Ulrich Thy Jensen. 2020. "Does Transformational Leadership Stimulate User Orientation? Evidence from a Field Experiment." *Public Administration* 98(1): 177–193.

Brunsson, Niklas. 2006. "Administrative Reforms as Routines." *Scandinavian Journal of Management* 22(3): 243–252.

Chen, Dingxiang, Ying Zhang, Ahmad Bayiz Ahmad, and Bangcheng Liu. 2023. "How to Fuel Public Employees' Change-Oriented Organizational Citizenship Behavior: A Two-Wave Moderated Mediation Study." *Review of Public Personnel Administration* 43(1): 185–208.

Christensen, Tom, Morten Egeberg, Per Lægreid, and Jarle Trondal. 2018. *Sentralforvaltningen. Stabilitet og endring gjennom 40 år (Central Government Administration. Stability and Change over 40 Years)*. Oslo: Universitetsforlaget.

Christensen, Tom, and Per Lægreid. 2007. "The Whole-of-Government Approach to Public Sector Reform." *Public Administration Review* 67(6): 1059–66.

de Sá e Silva, Michelle Morais, and Osmany Porto de Oliveira. 2023. "Incorporating Time into Policy Transfer Studies: A Comparative Analysis of the Transnational Policy Process of Conditional Cash Transfers and Participatory Budgeting." *Journal of Comparative Policy Analysis: Research and Practice* 25(4): 418–438.

Ding, Fangda, Lu Jiahuan, and Norma Riccucci. 2021. "How Bureaucratic Representation Affects Public Organizational Performance: A Meta-Analysis." *Public Administration Review* 81(6): 1003–18.

Ebinger, Falk, Sylvia Veit, and Bastian Strobel. 2022. "Role Models in the Senior Civil Service: How Tasks Frame the Identification of Senior Bureaucrats with Active and Reactive Roles." *International Journal of Public Administration* 45(14): 991–1002.

Elston, Thomas, Germà Bel, and Han Wang. 2023. "If it Ain't Broke, Don't Fix it: When Collaborative Public Management Becomes Collaborative Excess." *Public Administration Review* 83(6): 1737–60.

Fernandez, Sergio, William Resh, Tima Moldogaziev, and Zachary Oberfield. 2015. "Assessing the Past and Promise of the Federal Employee Viewpoint Survey for Public Management Research: A Research Synthesis." *Public Administration Review* 75: 382–394.

Fiva, Jon, Benny Geys, Tom-Reiel Heggedal, and Rune Sørensen. 2021. "Political Alignment and Bureaucratic Pay." *Journal of Public Administration Research and Theory* 31(3): 596–615.

Fleischer, Julia. 2013. "Time and Crisis." *Public Management Review* 15(3): 313–329.

Fleischer, Julia, Philippe Bezes, and Kutsal Yesilkagit. 2023. "Political Time in Public Bureaucracies: Explaining Variation of Structural Duration in European Governments." *Public Administration Review* 83(6): 1813–32.

Georgellis, Yannis, Elisabetta Iossa, and Vurain Tabvuma. 2011. "Crowding out Intrinsic Motivation in the Public Sector." *Journal of Public Administration Research and Theory* 21(3): 473–493.

Georgellis, Yannis, and Vurain Tabvuma. 2010. "Does Public Service Motivation Adapt?" *Kyklos* 63(2): 176–191.

Gershenson, Seth, Cassandra Hart, Joshua Hyman, Constance Lindsay, and Nicholas Papageorge. 2022. "The Long-Run Impacts of Same-Race Teachers." *American Economic Journal: Economic Policy* 14(4): 300–342.

Geys, Benny. 2023. "Fancy Seeing you Here … Again: Uncovering Individual-Level Panel Data in Repeated Cross-Sectional Surveys." *Public Administration Review* 83(6): 1761–71. https://doi.org/10.1111/puar.13693.

Geys, Benny, Sara Connolly, Hussein Kassim, and Zuzana Murdoch. 2020. "Follow the Leader? Leader Succession and Staff Attitudes in Public Sector Organizations." *Public Administration Review* 80(4): 555–564.

Geys, Benny, Sara Connolly, Hussein Kassim, and Zuzana Murdoch. 2023. "Employee Responses to Staff Reallocations in Public Sector Organizations: Evidence Using Longitudinal Data from the European Commission." *Public Management Review* Forthcoming: 1–21. https://doi.org/10.1080/14719037.2023.2222139.

Geys, Benny, Tom-Reiel Heggedal, and Rune Sørensen. 2021. "Popular Support for Environmental Protection: A Life-Cycle Perspective." *British Journal of Political Science* 51(3): 1348–55.

Geys, Benny, Tom-Reiel Heggedal, and Rune Sørensen. 2022. "Age and Vote Choice: Is there a Conservative Shift among Older Voters?" *Electoral Studies* 78: 102485.

Geys, Benny, Per Lægreid, Zuzana Murdoch, and Jarle Trondal. 2023. "Are Civil Servants Sensitive to Terrorism? Longitudinal Evidence from the 22 July 2011 Terror Attacks in Norway." *Public Administration Review* 83(6): 1772–84. https://doi.org/10.1111/puar.13694.

Gill, Jeff, and Kenneth Meier. 2000. "Public Administration Research and Practice: A Methodological Manifesto." *Journal of Public Administration Research and Theory* 10(1): 157–199.

Goetz, Klaus. 2014. "Time and Power in the European Commission." *International Review of Administrative Sciences* 80(3): 577–596.

Goetz, Klaus, and Jan-Hinrik Meyer-Sahling. 2009. "Political Time in the EU: Dimensions, Perspectives, Theories." *Journal of European Public Policy* 16(2): 180–201.

Greasley, Stephen, and Chris Hanretty. 2016. "Credibility and Agency Termination under Parliamentarism." *Journal of Public Administration Research and Theory* 26(1): 159–173.

Grytten, Jostein, Irene Skau, and Rune Sørensen. 2013. "Do Mothers Decide? The Impact of Preferences in Healthcare." *Journal of Human Resources* 48(1): 142–168.

Hajnal, Gyorgy. 2012. "Studying Dynamics of Government Agencies: Conceptual and Methodological Results of a Hungarian Organizational Mapping Exercise." *International Journal of Public Administration* 35(12): 832–843.

Hall, Peter. 1993. Policy Paradigms, Social Learning, and the State: The Case of Economic Policy making in Britain. *Comparative Politics* 25(3): 275–296.

Hood, Christopher. 1998. *The Art of the State: Culture, Rhetoric and Public Management*. Oxford: Clarendon Press.

Houtgraaf, Glenn. 2023. "Public Sector Creativity: Triggers, Practices and Ideas for Public Sector Innovations – A Longitudinal Digital Diary Study." *Public Management Review* 25(8): 1610–31.

Howlett, Michael, Michael Ramesh, and Anthony Perl. 2009. *Studying Public Policy*. Oxford: Oxford University Press.

Jakobsen, Mads Leth, Anne Mette Kjeldsen, and Thomas Pallesen. 2023. "Distributed Leadership and Performance-Related Employee Outcomes in Public Sector Organizations." *Public Administration* 101(2): 500–521.

James, Oliver, Nicolai Petrovsky, Alice Moseley, and George Boyne. 2016. "The Politics of Agency Death: Ministers and the Survival of Government Agencies in a Parliamentary System." *British Journal of Political Science* 46(4): 763–784.

Jensen, Ulrich, Donald Moynihan, and Heidi Salomonsen. 2018. "Communicating the Vision: How Face-to-Face Dialogue Facilitates Transformational Leadership." *Public Administration Review* 78(3): 350–361.

Jensen, Ulrich Thy, Lotte Bøgh Andersen, and Christian Bøtcher Jacobsen. 2019. "Only when we Agree! How Value Congruence Moderates the Impact of Goal-Oriented Leadership on Public Service Motivation." *Public Administration Review* 79(1): 12–24.

Jensen, Ulrich Thy, Anne Mette Kjeldsen, and Christian Fischer Vestergaard. 2020. "How Is Public Service Motivation Affected by Regulatory Policy Changes?" *International Public Management Journal* 23(4): 465–495.

Jordana, Jacint, David Levi-Faur, and Xavier Fernandez i Marin. 2011. "The Global Diffusion of Regulatory Agencies: Channels of Transfer and Stages of Diffusion." *Comparative Political Studies* 44(10): 1343–69.

Kassim, Hussein, John Peterson, Michael Bauer, Sara Connolly, Renaud Dehousse, Liesbet Hooghe, and Andrew Thompson. 2013. *The European Commission of the 21st Century*. Oxford: Oxford University Press.

Kickert, Walter, and Frans-Bauke van der Meer. 2011. "Small, Slow, and Gradual Reform: What Can Historical Institutionalism Teach us?" *International Journal of Public Administration* 34(8): 475–485.

Kim, Sangmook. 2021. "Education and Public Service Motivation: A Longitudinal Study of High School Graduates." *Public Administration Review* 81(2): 260–272.

Kingdon, John. 1995. *Agendas, Alternatives, and Public Policies*. New York: Longman.

Kjeldsen, Anne Mette, and Christian Bøtcher Jacobsen. 2013. "Public Service Motivation and Employment Sector: Attraction or Socialization?" *Journal of Public Administration Research and Theory* 23(4): 899–926.

Kleizen, Bjorn, and Muiris MacCarthaigh. 2023. "Nature or Nurture? Agency Life-Cycles as a Function of Institutional Legacy, Political Environment and Organizational Hardwiring." *Public Administration Review* 83(6): 1833–54.

Kuipers, Sanneke, Kutsal Yesilkagit, and Brendan Carroll. 2021. "Ministerial Influence on the Machinery of Government: Insights on the Inside." *West European Politics* 44(4): 897–920.

Langley, Ann, Clive Smallman, Haridimos Tsoukas, and Andrew van de Ven. 2013. "Process Studies of Change in Organization and Management: Unveiling Temporality, Activity and Flow." *Academy of Management Journal* 36(1): 1–13.

Levine, Charles. 1978. "Organizational Decline and Cutback Management." *Public Administration Review* 38(4): 316–325.

Levine, Charles. 1979. "More on Cutback Management: Hard Questions for Hard Times." *Public Administration Review* 39(2): 179–183.

Lichtmannegger, Christina, and Tobias Bach. 2023. "The Interaction of Multiple Drivers of Intra-Organizational Change in Ministerial Administrations: A Study of Three Decades of Structural Reforms in the Austrian Ministry of Agriculture." *Public Policy and Administration* 38(3): 287–308.

MacCarthaigh, Muiris. 2012. "Mapping and Understanding Organizational Change: Ireland 1922–2010." *International Journal of Public Administration* 35(12): 795–807.

MacCarthaigh, Muiris, and Paul Roness. 2012. "Analyzing Longitudinal Continuity and Change in Public Sector Organizations." *International Journal of Public Administration* 35(12): 773–782.

MacCarthaigh, Muiris, Paul Roness, and Külli Sarapuu. 2012. "Mapping Public Sector Organizations: An Agenda for Future Research." *International Journal of Public Administration* 35(12): 844–851.

Menard, Scott. 1991. *Longitudinal Research*. Newbury Park: Sage Publications.

Methot, Jessica, David Lepak, Abbie Shipp, and Wendy Boswell. 2017. "Good Citizen Interrupted: Calibrating a Temporal Theory of Citizenship Behavior." *Academy of Management Review* 42(1): 10–31.

Miller-Mor-Attias, Rotem, and Eran Vigoda-Gadot. 2022. "Evolving Motivation in Public Service: A Three-Phase Longitudinal Examination of Public Service Motivation, Work Values, and Academic Studies among Israeli Students." *Public Administration Review* 82(2): 210–224.

Montero, Serdio, and Gianpaolo Baiocchi. 2022. "A Posteriori Comparisons, Repeated Instances and Urban Policy Mobilities: What "Best Practices" Leave Behind." *Urban Studies* 59(8): 1536–55.

Moynihan, Donald, and Patricia Ingraham. 2010. "The Suspect Handmaiden: The Evolution of Politics and Administration in the American State." *Public Administration Review* 70: 229–237.

Moyson, Stéphane, Nadine Raaphorst, Sandra Groeneveld, and Steven van de Walle. 2018. "Organizational Socialization in Public Administration Research: A Systematic Review and Directions for Future Research." *The American Review of Public Administration* 48(6): 610–627.

Murdoch, Zuzana, Sara Connolly, Benny Geys, and Hussein Kassim. 2019. "Do International Institutions Matter? Socialization and International Bureaucrats." *European Journal of International Relations* 25(3): 852–877.

Murdoch, Zuzana, Sara Connolly, Hussein Kassim, and Benny Geys. 2022. "Legitimacy Crises and the Temporal Dynamics of Bureaucratic Representation." *Governance* 35(1): 65–82.

Nakrošis, Vitalis, and Mantas Budraitis. 2012. "Longitudinal Change in Lithuanian Agencies: 1990–2010." *International Journal of Public Administration* 35(12): 820–831.

Nielsen, Poul Aaes, Stefan Boye, Ann-Louise Holten, Christian Bøtcher Jacobsen, and Lotte Bøgh Andersen. 2019. "Are Transformational and Transactional Types of Leadership Compatible? A Two-Wave Study of Employee Motivation." *Public Administration* 97(2): 413–428.

Niskanen, William. 1971. *Bureaucracy and Representative Government*. Ames: Iowa State University Press.

Nyrup, Jacob, and Stuart Bramwell. 2020. "Who Governs? A New Global Dataset on Members of Cabinets." *American Political Science Review* 114(4): 1366–74.

Oberfield, Zachary. 2014. "Public Management in Time: A Longitudinal Examination of the Full Range of Leadership Theory." *Journal of Public Administration Research and Theory* 24(2): 407–429.

Office of Personnel Management. 2020. *Federal Employee Viewpoint Survey 2020 Technical Report*. Washington: United States Office of Personnel Management.

Painter, Martin, and Guy Peters. 2010. *Tradition and Public Administration*. Basingstoke: Palgrave Macmillan.

Pandey, Sanjay. 2017. "Theory and Method in Public Administration." *Review of Public Personnel Administration* 37(2): 131–38.

Park, Sanghee. 2013. "What Causes the Death of Public Sector Organizations? Understanding Structural Changes and Continuities in Korean Quangos." *International Public Management Journal* 16(3): 413–437.

Peters, Guy, and Brian Hogwood. 1988. "The Death of Immortality: Births, Deaths and Metamorphoses in the U.S. Federal Bureaucracy, 1933–1982." *The American Review of Public Administration* 18(2): 119–133.

Pierson, Paul. 2000. "Increasing Returns, Path Dependency, and the Study of Politics." *American Political Science Review* 94(2): 251–267.

Pollitt, Christopher. 2007. "New Labour's Re-Disorganization: Hyper-Modernism and the Costs of Reform – A Cautionary Tale." *Public Management Review* 9(4): 529–543.

Pollitt, Christopher. 2008. *Time, Policy, Management: Governing with the Past*. Oxford: Oxford University Press.

Rainey, Hal, and Paula Steinbauer. 1999. "Galloping Elephants: Developing Elements of a Theory of Effective Government Organizations." *Journal of Public Administration Research and Theory* 9(1): 1–32.

Ritz, Adrian, Gene Brewer, and Oliver Neumann. 2016. "Public Service Motivation: A Systematic Literature Review and Outlook." *Public Administration Review* 76(3): 414–426.

Rolland, Vidar, and Paul Roness. 2012. "Foundings and Terminations: Organizational Change in the Norwegian State Administration 1947–2011." *International Journal of Public Administration* 35(12): 783–794.

Rubin, Marilyn, and John Bartle. 2023. "Gender-Responsive Budgeting: A Budget Reform to Address Gender Inequity." *Public Administration* 101(2): 391–405.

Sarapuu, Külli. 2012. "Administrative Structure in Times of Changes: The Development of Estonian Ministries and Government Agencies 1990–2010." *International Journal of Public Administration* 35(12): 808–819.

Sarkees, Meredith, and Frank Wayman. 2010. *Resort to War: 1816–2007*. Washington: CQ Press.

Shipan, Charles, and Craig Volden. 2012. "Policy Diffusion: Seven Lessons for Scholars and Practitioners." *Public Administration Review* 72(6): 788–796.

Shipp, Abbie, and Karen Jansen. 2021. "The "Other" Time: A Review of the Subjective Experience of Time in Organizations." *Academy of Management Annals* 15(1): 299–334.

Skaaning, Svend-Erik, John Gerring, and Henrikas Bartusevicius. 2015. *A Lexical Index of Electoral Democracy*. Harvard Dataverse. https://doi.org/10.7910/DVN/29106.

Stritch, Justin. 2017. "Minding the Time: A Critical Look at Longitudinal Design and Data Analysis in Quantitative Public Management Research." *Review of Public Personnel Administration* 37(2): 219–244.

Teorell, Jan, Aksel Sundström, Sören Holmberg, Bo Rothstein, Natalia Alvarado Pachon, Cem Mert Dalli, and Yente Meijers. 2023. *The Quality of Government Standard Dataset*. University of Gothenburg: The Quality of Government Institute. https://doi.org/10.18157/qogstdjan23.

Turek, Konrad, Matthijs Kalmijn, and Thomas Leopold. 2021. "The Comparative Panel File: Harmonized Household Panel Surveys from Seven Countries." *European Sociological Review* 37(3): 505–523.

van Thiel, Sandra. 2022. *Research Methods in Public Administration and Public Management: An Introduction*. Oxford: Routledge.

Vigoda-Gadot, Eran, and Dana Vishdi. 2020. *Handbook of Research Methods in Public Administration, Management and Policy*. Cheltenham: Edward Elgar.

Willems, Evelien, and Jan Beyers. 2023. "Public Support and Advocacy Success across the Legislative Process." *European Journal of Political Research* 62(2): 397–421.

Witteloostuijn, Van, Arjen Boin Arjen, Celesta Kofman, Jeroen Kuilman, and Sanneke Kuipers. 2018. "Explaining the Survival of Public Organizations: Applying Density Dependence Theory to a Population of US Federal Agencies." *Public Administration* 96(4): 633–650.

Wynen, Jan, Koen Verhoest, and Bjorn Kleizen. 2019. "Are Public Organizations Suffering from Repetitive Change Injury? A Panel Study of the Damaging Effect of Intense Reform Sequences." *Governance* 32(4): 695–713.

Yackee, Jason Webb, and Susan Webb Yackee. 2021. "The American State Administrators Project: A New 50-State, 50-Year Data Resource for Scholars." *Public Administration Review* 81(3): 558–556.

Yackee, Susan Webb. 2023. "U.S. Agency Growth Aspirations and the Effect of Ideological Extremism." *Public Administration Review* 83(6): 1785–97.

Yesilkagit, Kutsal, Philippe Bezes, and Julia Fleischer. 2022. "What's in a Name? The Politics of Name Changes inside Bureaucracy." *Public Administration* 100(4): 1091–1106.

Zhu, Ling. 2012. "Panel Data Analysis in Public Administration: Substantive and Statistical Considerations." *Journal of Public Administration Research and Theory* 23(2): 395–428.

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