

# Ready, willing, and able? Bureaucratic capacity, slack resources, and political control

Thomas Elston<sup>1,\*</sup>, Yuxi Zhang<sup>2</sup>, D

- <sup>1</sup>Blavatnik School of Government, University of Oxford, Oxford, OX2 6GG, United Kingdom
- <sup>2</sup>Global Business School for Health, University College London, London, E20 2AE, United Kingdom
- \*Corresponding author: Blavatnik School of Government, University of Oxford, Radcliffe Observatory Quarter, Oxford, OX2 6GG, United Kingdom. Email: thomas. elston@bsg.ox.ac.uk

#### **Abstract**

Recent research suggests that bureaucratic responsiveness to political preferences may depend as much on organizational capacity as it does on incentive alignment, information recovery, and the strategic interaction of principal and agent. Better-resourced bureaucracies should be more able to comply with new political directions, irrespective of their willingness to do so. But because so much bureaucratic capacity is sunk into implementing the prior policy commitments of current and former principals, responding to new political signals will depend—much more specifically—on agents possessing adequate slack resources. This spare capacity should aid signal detection and program development; decrease hesitance at over-committing to new assignments in volatile environments; and provide resources for implementing changes whilst maintaining prior commitments. Using two-way fixed-effects regression and a novel dataset of 1,430 legislative requests of the UK executive, we confirm that possession of slack resources specifically (rather than organizational capacity generally) significantly increases the likelihood of bureaucracies consenting to make program changes requested by parliament. Agents with slack also commit to more precise timelines for implementation. And survival analysis further reveals that, once committed, bureaucracies with more budgetary slack complete their assignments more expeditiously.

Key words: bureaucratic capacity; slack resources; survival analysis; accountability; political control.

#### Introduction

Ensuring that civil service bureaucracies respond to changing political preferences is a democratic imperative. Alongside orthodox economic theories of principals, agents, incentives, and information asymmetry, a small and innovative body of research has begun to show that bureaucratic responsiveness may also be explained by organizational capacity (Bolton and Thrower 2022; Bolton, Potter, and Thrower 2016; Dasgupta and Kapur 2020; Drolc and Keiser 2020; Huber and McCarty 2004). In this account, political control depends not only on "getting the contract right" in terms of incentive alignment and information recovery, but also on ensuring that bureaucracies are sufficiently resourced to detect, interpret, and respond to new political signals. That is, rather than posing a necessary risk to a less expert, less attentive, and easily outmaneuvered principal, agent capacity may actually assist in minimizing agency loss. In short, civil servants must be ready, willing, and able.

Within empirical political science, bureaucratic capacity tends to be a fairly simple construct, measured pragmatically with little reference to management science. Notwithstanding some recent objections and innovations (for instance, Bednar 2023; Bersch, Praça, and Taylor 2017; Dasgupta and Kapur 2020), capacity is typically estimated from basic workforce metrics—often simply the bureaucracy's headcount, degree of professionalization, or ratio of merit-to-patronage appointments. And although these measures have so far proven fruitful in research and reflect how political scientists

conceive of the related concept of *legislative* capacity (see Boushey and McGrath 2017; Huber, Shipan, and Pfahler 2001; Woods and Baranowski 2006), management science would caution against relying exclusively on such simple metrics when trying to understand what an organization is "capable of."

A further impediment to advancing a theory of responsiveness centered on ability is determining which aspects of bureaucratic capacity are most relevant to detecting and adapting to new instructions. To date, scholars contributing to this emerging perspective have largely assumed that the entirety of an agent's capacity is freely available to respond to politicians, leading to total headcount, professionalization, or similar being adopted as the relevant explanatory variable (Bolton and Thrower 2022; Bolton, Potter, and Thrower 2016; Drolc and Keiser 2020). But this misunderstands the role of bureaucracies within political systems. In the main, government ministries and agencies are created and funded in order to implement the (incumbent or predecessor) principal's prior policy commitments—such as welfare entitlements for the poor, work permits for migrants, regulation of industry, or healthcare. Because so much capacity is sunk into implementing this "accumulation" of enduring policy commitments (Adam et al. 2020; Fernández-i-Marín et al. 2024; Knill, Steinbacher, and Steinebach 2021), and because those resources cannot be immediately redeployed without incurring significant legal, political and organizational costs, the civil service is greatly constrained in how it can respond to additional instructions. As a result, political control should depend less on total bureaucratic capacity than on what fraction of this is "left over" once current unavoidable commitments are met.

Take, for example, the largest public service bureaucracy in the UK: the English National Health Service (NHS), With some 1,500,000 employees, 140,000 hospital beds, and 3,000 operating theatres, this gargantuan organization has remarkable levels of capacity. But the continuing demand on that capacity is also immense: in every 36-hour period, NHS organizations interact with more than one million patients. When politicians desire healthcare reform, therefore, the need to maintain a ceaseless "business-as-usual" operation is a significant drag on resourcing any new policy ideas (Elston 2024). And although it might be assumed that larger bureaucracies are more prone to accumulating spare resources that can be diverted to innovation purposes when the need arises (in which case, total capacity would be a proxy for "slack" resources), the correlation is unstable. Indeed, as figure 1 illustrates, for the sample of UK government bureaucracies that we analyze below, there is no discernible relationship between headcount and three distinct measures of slack (explained later).

Our aim in this article is therefore to extend but reorient the recent turn to capacity-based explanations of political control by developing a more precise and authentic account of how bureaucratic capacity affects responsiveness. Firstly, we posit that slack resources—those "in excess of current business requirements" (Bentley and Kehoe 2020, p. 181)—will help bureaucracies to detect signals from politicians, develop change programs, and secure agreement among different internal constituencies. This is consistent with much management research indicating that organizational slack facilitates external attentiveness, innovation processes, and internal

deal-making (Carnes et al. 2019; Daniel et al. 2004; Mount et al. 2024). Next, since slack also acts to "buffer" organizations from environmental perturbations (Leuridan and Demil 2022; Moulick and Taylor 2017; O'Toole and Meier 2010), we further expect that possession of surplus resources will decrease bureaucrats' hesitance at over-committing to new policy assignments in volatile environments. This should lead to more precise commitments on timeframes for delivering the requested changes. And finally, slack should also provide a more-or-less accessible stock of resources necessary for completing these tasks, resulting in more expeditious implementation. Overall, our claim is that politicians will obtain greater responsiveness—on multiple dimensions—from bureaucracies in possession of slack resources specifically, rather than organizational capacity in general.

We test our theory on a novel dataset consisting of more than 1,400 exchanges between the UK parliament and executive during 2010-2015, and a panel measuring slack resources and assignment acceptance, anticipated timelines, and completion for 49 government organizations during 2010-2020 (to allow time for implementing each assignment). We capture the legislature's requests by focusing on the work of the Public Accounts Committee. During 2010-2015, this committee published 244 inquiry reports containing 1,674 separate asks of the bureaucracy, of which we analyze 1,430 relating to 49 ministries and agencies. For each request, we record the organization's response to the committee (i.e., whether it agrees to implement the change), the timeframe it commits to, and each of its progress updates until completion. As for the measurement of slack resources, we employ a combination of financial, personnel, and workforce-survey data. We measure the degree of underspend in each organization's

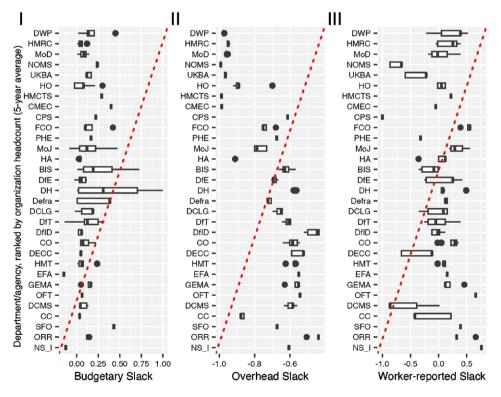


Figure 1. Relationship between total headcount and three measures of slack resources. Slack variables are standardized within the range of -1 to 1, with extreme outliers not shown. Bureaucracies are ranked by average staff size during 2010–2015, with smaller organizations at the bottom. Whisker plots depict the range of within-organization variation in slack for each year 2010–2015. Organizational acronyms are defined in Appendix I.

administration budget, taking larger surpluses to indicate greater capacity for extra work. We also calculate the management overhead of each organization, since, in the short term, manager time is more fungible than that of frontline staff (O'Toole and Meier 2010). And we use the annual civil service staff surveys to measure perceived workload in each organization over time.

Using two-way fixed-effects regression, we confirm that both budgetary slack and worker-reported slack correlate with substantially higher predicted probabilities of bureaucracies consenting to the Public Accounts Committee's requests. For each unit increase in budgetary slack, the average marginal effect on the probability of acceptance rises by 26 percent; and for worker-reported slack, the figure is 31 percent per unit increase. Departments and agencies with higher budgetary slack also propose more precise timelines for completion, consistent with our view of slack as hedging against over-commitment. And finally, survival analysis reveals that organizations with more slack are significantly more expeditious in delivery. At any given instant, the probability of an outstanding commitment being fulfilled (i.e., no longer "surviving" in the dataset) is 54 percent higher when there is one additional unit of budgetary slack. And where an organization experiences a year-on-year increase in administrative budget, there is a 48 percent higher probability of it fulfilling its assignment than otherwise. By contrast, a conventional "headcount" measure of capacity is a poor predictor of all three outcomes (acceptance, commitment, completion).

The remainder of the article proceeds as follows. The second and third sections elaborate our core argument. The fourth section describes our empirical case, the fifth introduces our data and methods, and the sixth presents our results and robustness checks. Finally, we discuss implications, limitations, and future research priorities.

### Capacity and political control

Control of civil service bureaucracies has long been regarded as a prototypical principal-agent problem, in which the influence of elected officeholders over policy implementation hinges on the intensity of goal conflict and hidden information, and the feasibility of curbing opportunism through effective contracting (see reviews in Brierley et al. 2023; Miller 2005; Moe 2012; Wood 2010). Questions of organizational capacity are not entirely absent from this literature; but, in the main, researchers have focused on the principal's capacity for writing detailed instructions, monitoring performance directly or through third parties, and generally producing a credible threat against bureaucratic rent-seeking (Aberbach 1990; Appeldorn and Fortunato 2022; Boushey and McGrath 2017; Huber, Shipan, and Pfahler 2001; Lillvis and McGrath 2017; Woods and Baranowski 2006). The agent's capacity, by contrast, whilst assumed to both motivate the decision to delegate in the first place and yet pose an inherent threat to the principal's interests (Bawn 1995; Ting 2011), has received far less theoretical or empirical attention. Indeed, raising the question of agent capacity only seems to have accelerated research interest into whether politicians have sufficient resources to deploy effective countermeasures against civil servants.

Huber and McCarty (2004, p. 481) were among the first to turn attention to the potential *enabling role* of bureaucratic capacity in securing political control. As they argued,

"the information problem has dominated the existing delegation literature, whereas the capacity issue has been essentially ignored." And although preferences remained firmly part of Huber and McCarty's formal theory of responsiveness, which models bureaucrats as unmotivated to comply with instructions in low-capacity contexts, their general critique struck a chord more widely and provoked some scholars to advocate distinguishing bureaucratic *interests* and *ability* more clearly (e.g., Krause 2010; Krause and Woods 2014; Moe 2012).

Although empirical projects taking this agenda forward were slow to emerge, two studies in the US made notable advances. Focusing on the quantity and quality of human resources in social security agencies, Drolc and Keiser (2020, p. 774) show that increased oversight by national and state-level politicians is effective only if bureaucratic capacity is also high. "Agencies need internal capacity," they conclude, "to respond to the signals and pressure from elected officials...." Similarly, Bolton, Potter, and Thrower (2016, p. 242) analyze leader turnover, workforce size, and workload at the Office of Information and Regulatory Affairs to suggest that: "the political control apparatus of the administrative state is fundamentally constrained by organizational capacity. ... [T]he implementation of political goals is stymied in low-capacity organizations." Both studies add credence to Huber and McCarty's (2004, p. 484) earlier, unorthodox conjecture that: "the politician can often induce a better action from a highcapacity 'enemy' bureaucrat (with an ideal point far from the politician's) than from a low-capacity 'friendly' bureaucrat." But this type of work remains rare, and the potential for combining the inchoate political science on capacity and control with more established concepts from management science is yet to be explored.

Organizational capacity is notoriously difficult to conceptualize and measure. Unlike organizational performance, which is a retrospective metric, capacity is future-oriented and somewhat speculative—a "prospective ability" (Bednar 2023, p. 2) denoting "the range of possible implementation levels" that might be achieved by an organization (Benn 2023). To date, the pragmatic response from political scientists has been to measure the size, composition, or perceived quality of the bureaucracy's workforce as proxies for its capacity. While this mirrors the approach taken in studies of legislative capacity (e.g., Boushey and McGrath 2017; Huber, Shipan, and Pfahler 2001), it is not without critics (Bednar 2023; Williams 2021). Moreover, it is not clear that capacity in legislatures, which are largely concerned with producing *new* policy (see Bucchianeri, Volden, and Wiseman 2024), should determine how capacity in bureaucracies is measured, these being mainly established and funded to meet past policy commitments. Scholars have long suspected that legislators tend to prioritize new policy creation over the dismantling of old policies (Bardach 1976), and recent empirical work has found the effect of this to be the gradual "accumulation" of public policies and progressive "overburdening" of the administrative state (Adam et al. 2020; Fernández-i-Marín et al. 2024; Knill, Steinbacher, and Steinebach 2021; Mettler 2016). In consequence, as Krause (2010, p. 539) observes, "many bureaucratic agencies are sufficiently occupied with present policy and administrative tasks such that they are not in a position to want or seek additional responsibilities."

To begin to accommodate these "business-as-usual" constraints on bureaucratic responsiveness, several recent quantitative studies of bureaucratic capacity have controlled for "current workload" (Bednar 2023; Bolton, Potter, and Thrower 2016; Dasgupta and Kapur 2020). And even in the realm of legislative capacity for executive oversight, Aberbach (1990, p. 69) has suggested that this might be most effective among congressional committees with "excess" staff and "slack resources." It is this line of thinking that we now seek to develop.

# Slack resources and bureaucratic responsiveness

All organizations must acquire and coordinate resources in order to pursue their objectives (Barney and Clark 2007; Lee and Whitford 2012). Organizational slack arises when the stock of resources held (or potentially held) exceeds "the minimum necessary to produce a given level of organizational output" (Nohria and Gulati 1997, p. 604). In other words, slack is "the difference between total resources and total necessary payments" (Cyert and March 1963, p. 36)—although, in practice, measuring this surplus is complicated by uncertainties over what activities are truly necessary (rather than discretionary) for maintaining the organization's objectives, and what minimum level of inputs is required to achieve those necessities.

It is usual in management science to distinguish between "available," "recoverable," and "potential" slack, according to how readily the surplus can be accessed and put to use (Bourgeois and Singh 1983; Mount et al. 2024). As Cheng and Kesner (1997, p. 2) explain, "Available slack consists of resources that are not yet committed to organizational design or a specific expenditure (e.g., excess liquidity)." Recoverable slack, by contrast, involves "resources that have already been absorbed into the system operation as excess costs (e.g., excess overhead expenditures)." Only through reform can managers extract and then redirect this kind of surplus. Finally, "potential slack consists of future resources that can be generated from the environment by raising additional debt or equity capital." We exclude this subtype from discussions hereafter.

There are a number of routes by which available and recoverable slack accumulate in organizations (Sharfman et al. 1988). Slack may be deliberately sought by managers, either as a "buffer" against unpredictable or adverse events (Bradley, Shepherd, and Wiklund 2011; McCrea 2022; Yılmaz, Özer, and Günlük 2014) or to provide a more benign environment for task completion (Bradshaw et al. 2007; Busch 2002). The organization's internal and external control apparatus should moderate this. In addition, since excess resources are consumed by running operations at anything other than optimal efficiency, all organizations are prone to accumulating some degree of recoverable slack, known by economists as X-inefficiency. The complexity of the organization's technology, dynamic variation in demand for its output, the competitiveness of its operating environment, and, again, the effectiveness of the control apparatus will all influence slack accumulation (Jensen 1993; Ruggiero, Duncombe, and Miner 1995; Sharfman et al. 1988). And in public bureaucracies specifically, slack may also depend on general fiscal conditions, past public management reforms that prioritize cost-cutting, the attentiveness of oversight authorities to the matching of supply and demand, or political attitudes toward contingency

staffing and "rainy day" funds (Leuridan and Demil 2022; O'Toole and Meier 2010).

A vast literature in management science investigates the impact of slack resources on the decision-making and performance of (particularly business) organizations (for reviews and/or meta-analyses, see Carnes et al. 2019; Daniel et al. 2004; Mount et al. 2024). Many studies find that those with more slack tend to respond more rapidly and substantively to signals from their external environments, including from shareholders and customers (Bowen 2002; Cheng and Kesner 1997; Xiao et al. 2018). As Bourgeois (1981, p. 30) explains, slack resources "allow an organization to adapt successfully to internal pressures for adjustment or to external pressures for change in policy." In particular, slack releases managers from being preoccupied with business-as-usual, either because production of a surplus provides reassurance that current organizational routines are effective, or because slack hedges against any operational mistakes that may result from a period of management inattention. As a result, slack increases opportunities for horizon scanning and inquisitive "slack search," rather than conventional "problemistic" search driven by specific errors in current operations.<sup>2</sup> Moreover, slack may also increase the organization's ability to overcome "strategic discord" between internal constituencies advocating different priorities (Bourgeois and Singh 1983, p. 43). With surplus resources in hand, investing in one proposal is less contingent on disinvesting in others. And when slack is available to absorb any mistakes resulting from innovation, governance of resource allocation tends to be more relaxed and "the legitimacy of experimenting is less likely to be questioned" (Singh 1986, p. 567).<sup>3</sup>

Interpreting this canon of knowledge in light of the question of civil service responsiveness, we expect public bureaucracies with more slack resources to be more attentive to shifts in political preferences, better placed to interpret and explore their implications for current and future operations, and less constrained in what new projects they can "take on" and agree internally whilst still meeting other obligations. We thus hypothesize:

H1: Bureaucracies with greater organizational slack will *agree* to implement more political requests than those with less slack.

We also expect bureaucracies with slack resources to make firmer commitments about when the agreed changes will be implemented. One of the primary functions of slack is to "buffer" organizations against environmental perturbations by providing a stock of resources to deal with unexpected

<sup>&</sup>lt;sup>1</sup>As Nohria and Gulati (1997, p. 605) explain, "In tight organizations with little slack, managerial attention is likely to be consumed by short-term performance issues," since there is little margin for error. On the other hand, "slack … buffers organizations from downside risk" (Singh 1986, p. 567)

<sup>&</sup>lt;sup>2</sup>As Vanacker, Collewaert, and Zahra (2017, p. 1309) argue, slack "allows managers to explore projects ... that would not have been approved in the face of resource scarcity."

<sup>&</sup>lt;sup>3</sup>Indeed, as Cheng and Kesner (1997, p. 3) argue, "When resources are tight, organizational members spend a great deal of time forming coalitions and bargaining for their fair share of resources." But when slack abounds, "there will be a solution for every problem" (Moch et al. 1977, p. 356) and a commensurate reduction in infighting. Moreover, governance and decision-processes differ in the two scenarios. Greater control and corporate discipline is required in low slack environments, resulting in more formalized, centralized, and robust processes of investment approval (Nohria and Gulati 1997; Singh 1986).

problems as they arise (Bradley, Shepherd, and Wiklund 2011; McCrea 2022; Yılmaz, Özer, and Günlük 2014). Indeed, Bourgeois (1981, pp. 29, 30) refers to slack as an "absorption mechanism" that "prevents a tightly wound organization from rupturing in the face of a surge of activity." In the presence of slack, therefore, we expect more confident predictions from bureaucrats about the time required for delivery, safe in the knowledge that the agency is well placed to both deliver the new assignment and meet any additional but as yet unknown challenges as they arise. Conversely, where additional commitments are taken on in the absence of slack but in full knowledge of environmental volatility and the likelihood of unplanned-for disruptions during the execution period, bureaucrats will include a "safety valve" in their commitment to politicians by specifying more vaguely the timeframe for task completion. Then, should the need arise, progress on the assignment can be paused when other priorities emerge, without contract violation. Hence:

H2: Bureaucracies with greater organizational slack will commit to a more explicit and precise *timeline* for completing political requests.

Lastly, once committed, organizations in possession of slack resources will complete their assignments more rapidly than those lacking surplus capacity. In particular, if staff, materials, or cash can be redeployed to non-routine purposes relatively easily, task completion should be more straightforward and less intermittent and interrupted than if managers must continually "beg and borrow" from other teams and budgets in order to advance the new project. As Bourgeois (1981, p. 31) argues, "slack is an agent of top management in ... executing strategic change." Therefore:

H3: Bureaucracies with greater organizational slack will more rapidly *complete* the political requests they have accepted for implementation.

#### **Empirical context**

To test this more constrained account of how organizational capacity should affect bureaucratic responsiveness, we analyze how departments and agencies in the UK civil service respond to requests for program changes made by the House of Commons' Public Accounts Committee. The PAC is the oldest, most prolific, and, reputedly, most influential oversight committee in the UK parliament (Cooper, Elston, and Bilous 2024; Dewar and Funnell 2016; Elston and Zhang 2023). The PAC consists of 14 backbench legislators, and receives financial audits and value-for-money reports from the 800 staff of the National Audit Office (the UK's "supreme audit institution"). The committee then interrogates the most senior bureaucrats—particularly "accounting officers," who have personal responsibility for financial propriety in their department/agency-and finally issues a further public report requesting changes to the design and/or operation of government programs. During the 2010-2015 parliament, the PAC published 244 reports, making on average 7 recommendations in each (max. 18, min. 1) and generating in total 1,674 separate requests of the bureaucracy. After excluding recommendations to wholly independent organizations, like the BBC and Royal Household, 1,430 requests

remain, directed toward 49 departments and agencies (see figure 2). (See Appendix III for illustrative examples of PAC recommendations.)

Typically, this process commences with the NAO investigating some aspect of government activity, selected by the Comptroller and Auditor General—a technocrat with a ten-year, non-renewable appointment, designed to ensure the NAO's independence from both parliament and executive. (Very occasionally, the PAC will issue a report without prior NAO research.) After the NAO's findings are published, the PAC holds one or more public hearing(s) to receive oral testimony from officials (almost never ministers) about program implementation, before publishing a report with recommendations. Government then responds to each PAC report within 2-3 months of its publication, accepting or rejecting each request on behalf of each named bureaucracy. In cases of acceptance, a timeline for the work's completion may also be provided. Thereafter, the Treasury publishes periodic "progress reports" on outstanding commitments, so that the implementation of each unfinished assignment can be tracked until the bureaucracy itself (not the PAC, nor the NAO) regards the action as completed (see Elston and Zhang 2023).

Based on these arrangements, we can measure three relevant dimensions of bureaucratic responsiveness to a highprofile legislative committee-agreement to implement a program change, commitment to a timeframe, and the actual time until completion. This provides the opportunity to study the impact of both inter-organizational and longitudinal variation in slack on political control for a wide range of departments and agencies. It is also important to note that, in the British system where a strong executive dominates in both the proposing of legislation and the setting of budgets, the PAC has no role in allocating resources to the organizations that it makes requests of. Appropriations, although ultimately authorized by parliament, are the result of (typically) annual negotiations between budget holders throughout government and HM Treasury as the finance ministry.4

#### Data and empirical strategy

To test our hypotheses, we employ a combination of regression (at both the organizational and request level) and survival analysis. We use a purpose-built dataset describing: each PAC request and government response during the 2010–2015 parliament; progress during implementation up to 2020; and the attributes of each mentioned bureaucracy, including four time-varying measures of slack.

#### Dataset

#### Dependent variables

Using the PAC's 244 inquiry reports, we established a data frame in which each row corresponds to an individual committee request (clustered by the report from which it came) and each column records case attributes, beginning with the

<sup>4</sup>It is conceivable that budget holders might invoke challenging PAC demands in their budget negotiations with the finance ministry, but this seems unlikely given the differing timelines involved and the Treasury's long-standing position that extra in-year expenses—even very significant changes, like higher pay settlements for public sector employees—should be funded from *within* existing budgets.

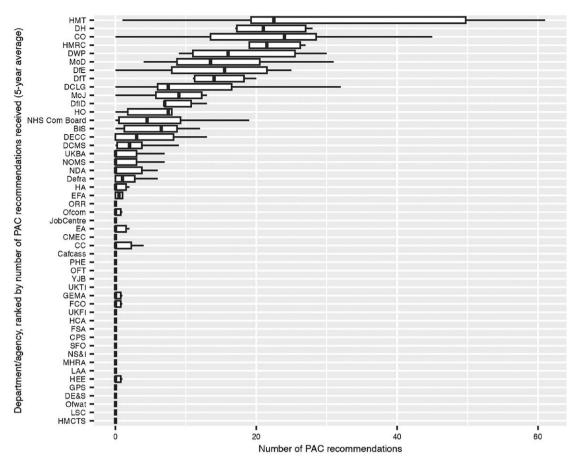


Figure 2. Distribution of 1,430 PAC requests by government organization, 2010–2015. Organizations are ranked by the mean number of requests received per year.

identity of the responsible organization.<sup>5</sup> Then, using the government reply to the committee, we record whether the department or agency fully agreed, partly agreed,<sup>6</sup> or disagreed with the request.<sup>7</sup> For the organization-level analysis, these responses were coded as 3, 2 and 1, respectively, and then averaged within years to create *acceptance scores*, where higher values indicate greater compliance with the committee. For the recommendation-level analysis, the response categories were collapsed into an *acceptance dummy*, where "1" indicates unqualified consent to the requested changes and "0" indicates otherwise.

In addition, we recorded the bureaucracy's "target implementation date" for completing the agreed actions, from which we coded a *timeline precision* variable. Here, a higher score indicates a more precise commitment (e.g., day-month-year, month-year)<sup>8</sup> while a lower score indicates a vague or highly contingent timeline (e.g., season-year, year, or "when legislative time allows"). Finally, switching from the initial response

documents to the Treasury's 14 "progress reports" up to November 2020, we add to the dataset every update provided by the bureaucracy for every outstanding action, up to and including the date at which the assignment switches from being reported as "in progress" to "completed." This panel forms the basis of our survival analysis, as explained below.

#### Independent variables

Various measures have been used to estimate slack in business organizations, the most common being accounting ratios measuring liquidity or administrative costs (see Mount et al. 2024). For the public sector, empirical studies of slack are rare and lack consensus on measurement. We therefore adopt a cautious approach by testing four different measures from three separate data sources, informed by prior public and private sector research.

Firstly, to capture the cash resources readily available to bureaucrats when taking on extra workload, we calculate the annual budget underspend in each organization. (Overspending is unlawful and extremely rare in our context.) This is known as "budgetary slack" (Davila and Wouters 2005). 10 Where the underspend is low, the organization has

<sup>&</sup>lt;sup>5</sup>Where multiple organizations are named, we assigned a lead organization based on where the predominant responsibility lay.

<sup>&</sup>lt;sup>6</sup>Partly agreed also includes "welcomed" or "noted."

<sup>&</sup>lt;sup>7</sup>Among the 1,430 PAC requests, 74.7 percent are fully accepted, 10.6 percent are fully rejected, and 14.7 percent are partially accepted. No organization that received more than six requests chose to accept all of them during 2010–2015, and most in this category are small arm's length bodies excluded from the regressions due to missing slack data.

<sup>&</sup>lt;sup>8</sup>Organizations that immediately complete their assignment before even notifying the committee of their intention to do are also scored highly on this commitment variable.

<sup>&</sup>lt;sup>9</sup>Among the most common are the "current ratio" (current assets divided by current liabilities) to measure available slack, and administrative expenses divided by sales to measure recoverable slack.

<sup>&</sup>lt;sup>10</sup>This measure is also closely related to the "surplus fund balance" measure of slack in Moulick and Taylor (2017) and Fan, Meng, and Wei (2020), although in those cases underspends are carried over from one financial year to the next whereas those in our dataset are not.

little capacity for extra work; where it is high—and so management could have chosen to incur additional, alreadyauthorized expenditure—the organization is in possession of "available" slack proportionate to the size of the budget foregone. To compute this variable, we use budget documents issued biannually by HM Treasury toward the start and end of each April-March financial year, alongside outturn data published the following July by individual departments and agencies. To restrict our measure to the policymaking part of each organization and exclude, for example, welfare payments, grants to businesses or local government, and other non-commutable "program" costs, we include only "administrative" expenditure, which relates to the cost of running the department or agency (see HM Treasury 2011, p. 202). We calculate a continuous budgetary slack variable as the final administration budget minus the end-of-year expenditure outturn for administration, scaled by that same year's initial budget. As is common in studies of slack (e.g., Marlin and Geiger 2015; Wiersma 2017), we lag our dependent variables against the numerical budgetary slack variable by one year so that a response to the PAC in 2012 is matched with that bureaucracy's budgetary slack for 2011. This helps to exclude the possibility of reverse causality by ensuring strict temporal ordering of the decision-making process that we study.

Secondly, we also create a dummy variable, budgetary increase, which measures growth (1) or not (0) in the administration budget during the financial year of the PAC's request compared with the previous year, after adjusting for inflation using the Office for Budget Responsibility's deflator. This dummy echoes Bourgeois's (1981, p. 37) distinction between "slack gainers" and "slack losers," and reflects the idea that decision-makers will more likely know their organization's general slack trajectory than precise real-time position, and so will use trajectory as a shortcut for decision purposes. Stationary or shrinking budgets are taken as indicating a reduction in slack, assuming that organizational output of comparable scale must be achieved in the present period as in the last, but with less input (after accounting for inflation). This is consistent with the literature on policy accumulation (Adam et al. 2020; Fernández-i-Marín et al. 2024; Knill, Steinbacher, and Steinebach 2021), but ignores the potential for productivity gains to compensate for budgetary loss. Since the dummy variable already reflects changes from the previous year to the current year, it is not lagged against our dependent variables.

Thirdly, we obtained for each department and most agencies the number of (full-time equivalent) staff employed each year. and their seniority, using the annual Civil Service Statistics. From this, we specify a continuous overhead slack variable measuring the managerial cadre (in grades 6 and above) relative to total headcount. Many prior studies compare administrative to total resourcing (variously defined) in order to gauge how much "recoverable" slack is absorbed in the organizational structure (Cheng and Kesner 1997; Wiersma 2017). By focusing on the managerial component of the administrative workforce, we follow O'Toole and Meier (2010) and Melton and Meier (2017) in regarding managers as providing organizations with partial slack capacity to the extent that, in the short term, they can be diverted from their routine tasks without significant detriment to current performance at least when compared with the immediate negative impact of rationing frontline personnel. This notion of "storing slack in administrative capacity" (O'Toole and Meier 2010, p. 345)

develops Henry Mintzberg's (1983, p. 126) earlier observation that "there [is] a good deal of slack in ... 'hierarchical expense." It is also consistent with Bourgeois's (1981, p. 34) suggestion of using administrative intensity as a proxy for organizational slack. Of course, some managerial tasks (like coordination of frontline staff or the resolution of complex cases) have more immediate performance consequences. Moreover, in the long-term, postponing routine managerial work (performance reviews, data analysis, planning, etc.) and deferring what Etzioni (1960) calls "organizational maintenance," would be expected to damage performance. This is perhaps why O'Toole and Meier (2010, p. 345) refer to managerial capacity as only "partial slack." Still, organizational slack is typically conceived myopically in terms of excess resources with respect to the "immediate production function" (McHugh and Cross 2021, p. 1). Again, we lag the government response to PAC requests against this numerical overhead slack variable by one year.

Finally, we use the annual Civil Service People Survey, which regularly achieves >350,000 responses from officials employed in >100 government organizations, to measure workforce perceptions of slack. In existing literature, survey measures typically ask managers to estimate budget achievability based on demands on the team and the resources available (e.g., Nohria and Gulati 1997). Building on this, our worker-reported slack variable measures the mean percentage of employees (not just managers) agreeing or strongly agreeing that they "have an acceptable workload" and "a good worklife balance" during the survey window (September-October each year). High workload and poor work-life balance imply that task demands closely match or even exceed available resources, indicating low slack in the employing organization, and vice-versa. Data availability mirrors that for our overhead slack variable, but we do not lag this variable on the understanding that employee workload perceptions are more subjective and possibly more transitory, and that managerial responses to them are likely to be more immediate.

Figure 3 summarizes our principal slack measures for the period 2010–2015. Here and in all model specifications the three continuous variables are rescaled to the range [-1,1], to aid comparability. The median and interquartile ranges are shown, with dots indicating years with slack outside the interquartile range. Organizations are ranked by the mean of each slack variable. Overall, worker-reported slack tends to vary most across organizations, with a span of 1.75-point on the standardized scale. This is followed by budgetary slack (1.25-point span), and then by overhead slack (0.75-point span). Both budgetary and worker-reported slack also show considerable withinorganization variation over time, whereas managerial staff tend to occupy a more consistent share of each organization's workforce. In line with much empirical research (Wiersma 2017), our various measures of slack are uncorrelated.

#### Control variables

During our main timeframe of 2010–2015, there was a single chair of the PAC, a single head of the NAO, and only one prime minister and deputy prime minister, chancellor (finance minister), home secretary and foreign secretary, and a general slowing in the rate of turnover in other ministerial positions. Because the

<sup>&</sup>lt;sup>11</sup>For example, organizations might have low cash reserves but a good work–life balance and/or high overheads.

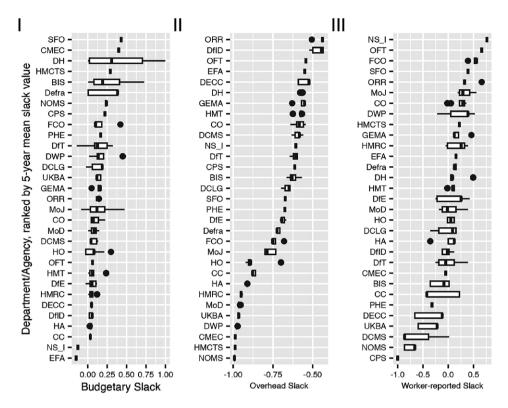


Figure 3. Organizations and slack, 2010–2015. Slack variables are standardized to the range of -1 to 1, with extreme outliers not shown.

challenge of planning and implementing the committee's requests may vary by the type of policy change involved (Benton and Russell 2013), we include a manually-coded six-point categorical variable capturing the type of action required, adapting Benton and Russell's general coding scheme for the PAC's value-formoney remit (see Elston and Zhang 2023). In addition, because joint working between two or more organizations may increase bargaining, compromise and even free-riding during the agreement and execution processes, we include a dummy variable of collaboration requirement. This takes a value of "1" if the PAC instructed the organization to work with external partners, and "0" if otherwise. Both variables were coded by the authors and three research assistants following detailed protocols and using a blind double-coding inter-coder reliability procedure (Elston and Zhang 2023). Finally, organization and calendar year control dummies are included in all regression models. And to allow us to compare the explanatory power of our slack variables against the more conventional measure of bureaucratic capacity, we also include organization headcount (full-time equivalent).

A detailed description of all variables is provided in Appendix II, along with descriptive statistics in Appendix IV.

#### **Empirical strategy**

To test whether slack resources increase the chance of bureaucracies consenting to politically-requested changes (H1), we employ two strategies. We start with the unit of analysis as the organization-year, aggregating the base unit of our main dataset (the PAC request) to produce an annually pooled score of acceptance for each department and agency during 2010–2015. This facilitates direct comparisons with existing studies of capacity and responsiveness (e.g., Drolc and Keiser 2020). We then disaggregate to the level of individual recommendations, using logistic regression to estimate

the likelihood of an individual request being accepted (or not) by the relevant bureaucracy, now controlling for the properties of the individual requests (e.g., type of action) and so better isolating the effect of slack on bureaucratic compliance. We continue at this more granular level when testing the effect of slack on commitment to implement (H2), replacing the agree-disagree dummy with the timeline precision variable and using both OLS and multinomial logit models. All these models include fixed effects by organization and calendar year. The two-way fixed effect guards against unknown sources of heterogeneity; for example, staff morale in particular bureaucracies, political events in a particular year, or the economic trend. Because the Breusch-Pagan test indicates that heteroskedasticity is present, all models in Tables 1-3 are presented with robust standard errors clustered by organization in parentheses (see Abadie et al. 2022).

To explore the effect of slack resources on timeliness of assignment completion (H3), we perform survival analysis. This technique has gained increasing attention in the social sciences for its unique strengths in understanding the timing of an event or the persistence of a status quo. As noted, our dataset includes repeated observations on the progress of more than 1,000 accepted assignments until the point at which the bureaucracy reports completion. Hence, the "event" we try to predict is the conversion of a request from "still outstanding" to "completed."

One challenge in implementing the survival analysis is the issue of censoring. This arises when the event of interest is unobserved for some cases; for example, because it occurs before the observation period commences, known as *left* censoring, or after it ends, known as *right* censoring (Turkson, Ayiah-Mensah, and Nimoh 2021). Left censoring in our data involves immediate completion of the assignment before the

government has even issued its initial response to the PAC; and right censoring arises, more rarely, when completion occurs *after* our dataset expires in November 2020. Both types of case are dropped from the survival analysis. We also have the problem of *interval* censoring, which occurs when the event is known to have occurred within a specific time interval (i.e., between publication of the current and previous progress report), but the exact timepoint is unknown. To accommodate interval censoring, we infer the completion date as a random variable occurring within the certain time range, following recent developments in biostatistics (Rodrigues et al. 2018; Zhang and Sun 2010).

A second challenge is the inclusion of time-variant covariates. As noted, organizational slack varies longitudinally as well as inter-organizationally. One option is simply to calculate a slope across multiple years and use this to predict the event of completion. However, following Therneau, Crowson, and Atkinson (2024), a more robust solution is to further disaggregate our original one-row-one-case data frame so that every update for every accepted assignment occupies its own row. We then populate each row with timevarying organizational covariants corresponding to the specific financial year in which that update was published (or the prior year, in the case of lagged variables). In this way, we retain maximum granularity and the model estimation becomes more reliable since covariates are only used to predict events (or non-events) in consecutive periods, rather than assuming longer-range associations.

#### **Results**

#### Slack and agreement to new assignments

Table 1 reports the results of OLS regressions in which the dependent variable is the organization-level average acceptance score. Although this analysis does not utilize our more

granular, request-level dataset, it facilitates direct comparisons with existing studies of capacity and responsiveness, and so provides a useful starting point. Independent variables measuring budgetary, overhead and worker-reported slack are added separately in models (1) to (3), and then in combination in column (4) to compare effect sizes and significance. Consistent with Hypothesis 1, worker-reported slack positively correlates with the acceptance score, and its statistical significance holds across all models. The negative effect of overhead slack was not hypothesized, although is not significant. The headcount measure of organizational capacity has no effect on acceptance scores.

Next, Table 2 reports logistic regressions conducted at the request level. We retain all covariates from Table 1, but add collaboration requirement and type of action controls. Now, budgetary slack and workforce-reported slack are significantly and positively correlated with acceptance. Overhead slack continues to have a consistent but unexpectedly negative impact on acceptance, although again is not statistically significant. Unlike existing studies, organization headcount is negatively related to responsiveness, although it is also not significant.

To assess whether the robustness of our results depends on the linearity assumption of the two-way fixed effects logistic model (Imai and Kim 2021), we re-estimated our models using the Poisson Pseudo Maximum Likelihood (PPML) approach with high-dimensional fixed effects. The results, presented in Appendix V Table A, confirm that our main conclusions remain robust even when the functional form assumptions are relaxed.

To help interpret Table 2, figure 4 plots the marginal effect at the mean (MEM) of each slack variable, noting the average marginal effect (AME) at each x-axis label. Grey shadows depict the 95 percent confidence intervals. Commencing with AME, acceptance is shown to be 26 percent more likely for each unit increase in the bureaucracy's budgetary slack. This is significant at the 99.9 percent level. Acceptance is also 10

Table 1. Slack and acceptance of PAC requests: organization-level OLS regression.

	Dependent variable					
	Acceptance score					
	(1)	(2)	(3)	(4)		
Budgetary slack	0.06 (0.23) P = .78			0.18 (0.31) P = .56		
Budgetary increase	0.15 (0.15) P = .34			0.21 (0.15) P = .17		
Overhead slack		-0.55 (1.25) P = .66		-0.45 (1.27) P = .72		
Worker-reported slack			0.46 (0.22) $P = .04$	0.48 (0.18) $P = .01$		
Organization headcount	-1.08 (0.84) P = .20	-0.92 (0.78) P = .24	-0.64 (0.78) P = .41	-0.87 (0.96) P = .37		
Constant	1.76 (0.62) $P = .01$	1.58 (1.06) P = .14	2.16 (0.54) $P = .00$	1.58 (0.97) $P = .11$		
Organization fixed-effect	Yes	Yes	Yes	Yes		
Year fixed-effect	Yes	Yes	Yes	Yes		
SE clustered by	Org.	Org.	Org.	Org.		
Observations	113	107	110	100		
Adjusted R <sup>2</sup>	0.07	-0.02	0.08	0.11		

Table 2. Slack and acceptance of PAC requests: request-level logistic regression.

	Dependent variable					
	Acceptance dummy					
	(5)	(6)	(7)	(8)		
Budgetary slack	1.47 (0.50) P = .00			1.55 (0.52) P = .00		
Budgetary increase	0.52 (0.36) P = .14			0.64 (0.34) P = .06		
Overhead slack		-7.11 (5.46) P = .19		-5.71 (4.18) P = .17		
Worker-reported slack			1.55 $(0.41)$ P = .00	1.87 (0.32) $P = .00$		
Organization headcount	-3.26 (2.07) P = .12	-2.95 (1.90) P = .12	-2.34 (2.31) P = .31	-2.67 (2.18) P = .22		
Collaboration requirement	0.12 (0.23) P = .62	0.17 (0.22) $P = .43$	0.11 (0.20) P = .58	0.09 (0.21) P = .68		
Analysis, research and data	0.52 (0.26) <b>P = .04</b>	0.61 (0.25) $P = .01$	0.70 (0.24) $P = .00$	0.55 (0.23) $P = .02$		
Clarify and disclose	0.44 (0.29) P = .13	0.59 (0.27) $P = .03$	0.65 (0.28) $P = .02$	0.52 (0.25) $P = .04$		
Guidance and control	0.58 (0.21) <b>P = .01</b>	0.69 (0.18) P = .00	0.74 (0.18) $P = .00$	0.64 (0.18) $P = .00$		
Internal management	0.69 (0.37) P = .06	0.81 (0.36) $P = .02$	0.89 (0.33) $P = .01$	0.79 (0.34) $P = .02$		
Not actionable	-0.52 (0.47) P = .27	-0.37 (0.42) P = .38	-0.39 (0.43) P = .35	-0.57 (0.44) P = .19		
Constant	-2.68 (2.04) P = .19	-6.36 (3.62) P = .08	-1.41 (1.64) P = .39	-5.93 (2.90) $P = .04$		
Organization fixed-effect	Yes	Yes	Yes	Yes		
Year fixed-effect	Yes	Yes	Yes	Yes		
SE clustered by	Org.	Org.	Org.	Org.		
Observations	1,375	1,333	1,318	1,313		
AIC	1,465.27	1,469.19	1,457.91	1,418.48		

percent more likely where the organization receives a year-onyear increase in its administration budget, and 31 percent more likely with each additional unit of workforce-reported slack. All three results are highly significant. Overhead slack retains its negative and non-significant influence on acceptance.

The magnitude of the effect of slack on responsiveness can also be gleaned from the MEM plots. According to Panel I of figure 4, when holding all other variables constant at their mean values, increasing budgetary slack from 0 to 1 on the standardized scale (corresponding to increasing underspends from 0.6% to 71.1%) raises the likelihood of accepting the PAC's request from 70% (95% CI [0.67, 0.73]) to 96% (95% CI [0.81, 1.11]). Similarly, for the dummy budget variable, organizations with constant or declining administrative budgets have a 68% (95% CI [0.65, 0.72]) likelihood of acceptance, but that rises to 80% (95% CI [0.76, 0.84]) where there is year-on-year budgetary growth (see Panel II). And, most notably, when the standardized scale for worker-reported slack rises from -1 to 1 (corresponding to 45.5 percent and 75 percent of employees reporting acceptable workloads and worklife balance), likelihood of acceptance from 40% (95% CI [0.24, 0.56]) to 94% (95% CI [0.84, 1.04]) (see Panel IV). Conversely, when the standardized overhead slack variable

is -0.8 (meaning 21% of employees are managers), the likelihood of acceptance is 81% (95% CI [0.72, 0.91]), *decreasing* to 45% when the standardized variable is -0.4 (and 57% of employees are managerial) (Panel III).

#### Slack and timeline precision

Moving to Hypothesis 2 and the effect of slack resources on bureaucratic commitment, we adopt the dependent variable of *timeline precision* as a continuous scale for which we fit OLS models.<sup>12</sup> The results, shown in Table 3, reveal that both budgetary measures positively and significantly correlate with increased timeline precision. However, neither overhead slack nor workforce-reported slack, nor indeed a conventional headcount measure of organizational capacity, predict timeline precision. As a robustness check, we reconstitute the precision measure as a six-point categorical variable, for which we fit multinomial logit models. These results, reported in Table 4, confirm our main findings. An organization with higher budgetary slack is significantly more likely

<sup>&</sup>lt;sup>12</sup>Timeline precision is a categorical variable. Instead of using ordered logit model, it is now conventional in econometric literature to fit OLS models to ordered categorical dependent variables (Algan and Cahuc 2009; Nunn and Wantchekon 2011).

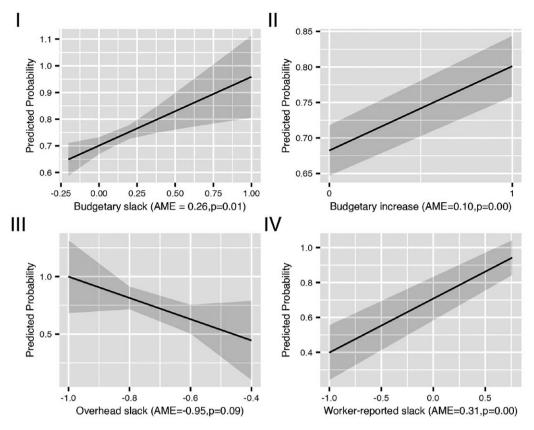


Figure 4. Marginal effect of slack variables in predicting PAC request acceptance. Plot based on marginal effect at the mean (MEM). AME: average marginal effect.

to commit to a precise timeline for completing its assignment compared to the baseline category of making no timeline commitment to the PAC. Moreover, an organization with higher budgetary slack, or with a year-on-year increase in administration budget, is also more likely to have taken prompt action to complete the assignment by the time the government's initial response to the committee was published (which results in "left-censored" data in our survival analysis, below).

## Slack and assignment completion

Having explored the effect of slack resources on the bureaucracy's acceptance of, and commitment to, the PAC's requests, we conclude by exploiting the longitudinal elements of our data to track the implementation of these assignments over time.

Since most implementation processes in our dataset span multiple years, during which time each organization's slack varies somewhat, we employ the time-variant Cox Proportional Hazards model (Therneau, Crowson, and Atkinson 2024).<sup>13</sup> The dependent variable is formed from three elements: *start* and *stop* are the two time points defining a follow-up interval for each request; and *status* is a dummy variable where "1" indicates that completion occurred at some point during that interval, and "0" indicates that implementation remains in progress. As discussed, the exact timing of completion is assumed to be randomly distributed within the range to account for the imprecision of the timestamp (Gómez et al. 2009; Rodrigues et al. 2018; Zhang and Sun

2010). Our independent variables are in the same form as used in testing H1 and H2, above, although slack values are truncated at the 5 percent and 95 percent levels to remove the impact of outliers. We again used lagged measures of budgetary and overhead slack. We also include all control variables from previous regressions, including *organization* fixed effects and *year* fixed effects. Furthermore, since each implementation process has multiple observations that are correlated with one another, a cluster variance *recommendation ID* is added to the model. For the 1,430 PAC requests included in our dataset, we have 2,897 unique follow-up intervals. After removing left-censored cases and intervals with missing slack data, we are left with 1,772 analyzable follow-up episodes.

Table 5 presents the exponential coefficients (or hazards ratio) of covariates, in which values less than 1.0 indicate a negative relationship. Robust standard errors are reported in brackets next to the hazards ratios. In Model (13) to (15), we add budgetary, overhead and worker-reported slack separately, and include all in Model (16). As Table 5 indicates, these results show that both budgetary slack and budgetary increase have a positive and significant effect on the hazards ratio for the event of assignment completion. According to Model (16), at a given instant in time, the probability of assignment completion by an organization with one more unit of budgetary slack is 54 percent greater. Similarly, an organization experiencing year-on-year growth in administrative resources is 48 percent more likely to fulfill its commitment to the PAC than one experiencing budget stasis or decline. Both results are significant at the 99 percent level. Moreover, according to Model (15), an organization with one more unit of employees reporting an acceptable workload and worklife balance is 30 percent more likely to turn the status of

<sup>&</sup>lt;sup>13</sup>Cox Proportional Hazards models assume that the relative hazard remains constant over time across different covariate levels, and that the relationship between the log hazard and each continuous covariate is linear (Hashim and Weiderpass 2019; Kuitunen et al. 2021). We test these assumptions in Appendix VI figure A and find no violations.

Table 3. Slack and planned implementation timeframe: request-level OLS regression.

	Dependent variable					
	Timeline precision					
	(9)	(10)	(11)	(12)		
Budgetary slack	0.82 (0.39) P = .04			0.92 (0.44) P = .04		
Budgetary increase	0.44 (0.14) $P = .00$			0.48 (0.16) $P = .00$		
Overhead slack		-0.01 (0.75) P = .99		0.48 (0.71) P = .50		
Worker-reported slack			-0.18 (0.45) P = .69	0.03 (0.38) P = .94		
Organization headcount	-0.48 (0.90) P = .60	-0.13 (0.91) P = .89	-0.22 (1.03) P = .83	-0.51 (1.01) P = .62		
Collaboration requirement	-0.09 (0.14) P = .52	-0.06 (0.14) P = .67	-0.07 (0.14) P = .61	-0.09 (0.14) P = .54		
Analysis, research and data	0.05 (0.25) P = .85	0.16 (0.29) P = .58	0.15 (0.30) P = .60	0.09 (0.25) P = .73		
Clarify and disclose	0.06 (0.23) $P = .81$	0.17 (0.27) P = .52	0.16 (0.27) P = .55	0.08 (0.24) $P = .73$		
Guidance and control	0.06 (0.28) P = .82	0.15 (0.32) P = .64	0.15 (0.32) P = .63	0.08 (0.29) P = .77		
Internal management	0.01 (0.23) $P = .96$	0.12 (0.26) P = .64	0.11 (0.25) $P = .65$	0.04 (0.23) P = .86		
Not actionable	-0.13 (0.27) P = .62	-0.05 (0.30) P = .86	-0.04 (0.31) P = .91	-0.11 (0.29) P = .70		
Constant	0.10 (0.77) $P = .89$	0.74 (0.74) P = .31	0.67 (0.90) P = .46	-0.15 (0.82) P = .85		
Organization fixed-effect	Yes	Yes	Yes	Yes		
Year fixed-effect	Yes	Yes	Yes	Yes		
SE clustered by	Org.	Org.	Org.	Org.		
Observations	1,306	1,263	1,270	1,245		
Adjusted R <sup>2</sup>	0.42	0.40	0.40	0.41		

implementation from "in progress" to "completed," but this loses statistical significance in the full model. Overhead slack regains its previous negative impact on responsiveness (see Table 2), but is only significant at the 90 percent level. Finally, while organization headcount has a positive and significant impact on implementation in Model (13), it loses significance in all the other models.

One possible caveat to this analysis is that, due to occasional reporting delays, a small proportion of intervals exceed 12 months. This creates difficulties in matching updates with slack variables, particularly given our use of a one-year lag. As a robustness check, Model (17) in Table 5 removes all such instances where the gap between *start* and *stop* exceeds one year, and then fits the complete survival model to the remaining 1,554 episodes. Both budgetary measures continue to have positive effect on assignment completion, though only the budget dummy remains highly significant across all models. Overhead slack gains significance in the extended Cox model used as a robustness check in Model (18), showing a consistent negative effect on assignment completion.

#### **Discussion**

To summarize, using our dataset of 1,430 legislative requests to UK government bureaucracies between 2010 and 2015, we

found: that both budgetary and worker-reported slack significantly increase the likelihood of bureaucrats agreeing to take on new assignments (Table 2; figure 4); that budgetary slack and budgetary increase also correlate with more precise timelines for delivering these commitments (Tables 3 and 4); and that these are also associated with more rapid completion of assignments (Table 5). Budgetary and worker-reported slack also greatly outperform the conventional headcount measure of capacity, which proved unstable in direction and typically fell short of statistical significance. Altogether, then, while these findings attest to the importance of organizational capacity in predicting the political control of bureaucracies, in line with several recent empirical studies from the US, they also indicate that it is slack resources specifically, rather than organizational capacity in general, that makes civil servants more responsive to democratic overseers. This is consistent with expectations from management science, where slack has

<sup>14</sup>Drawing on Schoenfeld tests for Model (17) (figure B, Appendix VI), we addressed the violation of the proportional hazards assumption for *Worker-reported slack* by transforming it into a categorical variable using quartile cutpoints at the 25th, 50th, and 75th percentiles. This was included as strata term in Model (18), replacing the continuous version to correct for non-proportionality and assess the robustness of estimates in an extended Cox model, which remained valid. As is standard, the stratified variable is not reported in the Model (18) output (Kuitunen et al. 2021; Licht 2011).

Table 4. Slack and planned implementation timeframe: request-level multinomial logit regression.

	Timeline precision					
	Subject to condition	Vague timeline	Standard timeline	Detailed timeline	Already implemented	
Budgetary slack	-24.42 (42.57) P = .57	-2.08 (1.08) P = .05	-1.16 (0.91) P = .21	27.29 (12.57) $P = .03$	3.77 (1.14) P = .00	
Budgetary increase	1.91 (9.76) P = .84	0.48 (0.39) P = .22	0.10 (0.32) $P = .74$	0.34 (0.85) $P = .68$	1.27 (0.30) $P = .00$	
Overhead slack	-6.54 (45.01) P = .88	-0.09 (1.75) P = .96	-1.41 (1.58) P = .37	7.28 (9.81) P = .46	1.24 (1.54) $P = .42$	
Worker-reported slack	15.83 (30.58) P = .60	0.39 (1.02) $P = .71$	1.21 (0.77) $P = .12$	-1.83 (2.51) $P = .47$	0.36 (0.74) $P = .63$	
Organization headcount	-4.62 (144.02) P = .97	-6.38 (2.99) $P = .03$	-0.31 (2.50) P = .90	23.43 (12.25) P = .06	-1.40 (2.46) P = .57	
Collaboration requirement	-0.19 (1.17) P = .87	0.32 (0.39) $P = .41$	-0.08 (0.36) P = .82	0.50 (0.72) P = .49	-0.20 (0.35) P = .57	
Analysis, research and data	9.10 (81.33) P = .91	0.39 (0.57) P = .49	0.71 (0.57) P = .21	0.44 (1.30) $P = .73$	0.16 (0.54) $P = .76$	
Clarify and disclose	9.04 (81.33) P = .91	-0.16 (0.56) P = .78	0.57 (0.57) P = .32	1.47 (1.23) $P = .23$	0.08 (0.53) P = .89	
Guidance and control	7.87 (81.33) P = .92	0.10 (0.57) $P = .86$	0.31 (0.58) P = .59	0.43 (1.32) $P = .75$	0.10 (0.54) $P = .85$	
Internal management	4.45 (81.55) P = .96	-0.21 (0.62) P = .73	0.33 (0.62) $P = .59$	0.90 (1.34) P = .50	-0.06 (0.57) P = .92	
Not actionable	-0.15 (0.003) <b>P = .00</b>	-2.55 (148.99) P = .99	-3.34 (68.00) P = .96	-3.97 (0.48) $P = .00$	-4.82 (97.91) P = .96	
Constant	-22.68 (123.84) P = .85	-14.74 (112.71) P = .90	-11.46 (2.13) P = .00	-16.79 (59.82) P = .78	-18.57 (2.10) $P = .00$	
Organization Fixed-effect	Yes	Yes	Yes	Yes	Yes	
Year Fixed-effect	Yes	Yes	Yes	Yes	Yes	
Observations	1,245	1,245	1,245	1,245	1,245	
Akaike Inf. Crit.	2,749.47	2,749.47	2,749.47	2,749.47	2,749.47	

long been regarded as enabling greater external attentiveness, willingness to experiment, and capacity for change.

According to theory, unspent budget should provide the greatest responsiveness, this being the most ready-to-go and fungible form of slack. As Wiersma (2017, p. 447) observes, cash is "a sine qua non for strategic action." And yet, while our two budgetary variables are indeed the most consistent predictors across the hypothesis tests, the perceptual measure of worker-reported slack has greatest explanatory power at the outset of the PAC accountability regime. This might indicate that workforce-reported slack is not only measuring the balance of workload-to-resources, but is also a proxy for staff morale or even turnover intent, to which senior managers pay close attention when determining their capacity for extra assignments. Conversely, because overhead slack has already been "absorbed" into operations, this form of surplus must first be recovered before it can be redeployed, potentially weakening the effect on responsiveness. Indeed, our unstable and nonsignificant results for overhead slack may indicate reluctance or inability to divert senior civil servants away from their ordinary but urgent activities, such as briefing ministers and meeting deadlines from the finance ministry. And where, in our early analyses, overhead slack appears to decrease the chance of accepting PAC requests (Tables 1 and 2, but rarely achieving significance), this may indicate that more "top heavy" organizations suffer from greater inertia, fragmented power, and strategic discord, making it harder to agree new initiatives.

#### Limitations

Our study has several limitations.

Firstly, although we assemble a ten-year panel using highquality financial, personnel and survey data, each of our four measures of slack has strengths and weaknesses in the extent to which it accurately compares workload pressures against resources. Developing and validating improved measures of available, recoverable and potential slack that are tailored to the public sector context is clearly a priority for research, potentially using production function analysis to arrive at a better comparison of sufficient and available resources.

Secondly, our survival analysis considers only the speed of implementing the PAC's request, not the quality or extent of changes made. Also, whilst we classify key attributes of each PAC-issued recommendation, we are unable to compute the magnitude of the change requested of the bureaucracy and, thus, what resourcing it requires. And the completion of assignments is self-reported by individual bureaucracies, and although risk of future investigation by either the PAC or NAO should discourage egregious misrepresentation, some manipulation is possible but presently untested.

Thirdly, several sources of endogeneity may affect our results. The PAC may have approximate knowledge of the level of slack available in each bureaucracy, and may adjust its requests so as not to overload already-struggling ministries and agencies. However, this seems unlikely given the vast,

Table 5. Slack and implementation of PAC requests: time-variant survival analysis with Cox proportional hazards model.

	Dependent variable Hazards ratio of implementation completion—exp(coef)							
	(13)	(14)	(15)	(16)	(17) Robustness check	(18) Robustness check		
Budgetary slack	1.58 (0.16) P = .00			1.54 (0.16) $P = .00$	1.20 (0.16) P = .07	1.11 (0.18) P = .39		
Budgetary increase	1.50 (0.09) $P = .00$			1.48 (0.09) $P = .00$	1.28 (0.10) $P = .00$	1.35 (0.11) $P = .00$		
Overhead slack		0.31 (0.63) $P = .07$		0.34 (0.60) P = .06	0.54 (0.55) P = .13	0.19 (0.68) $P = .01$		
Worker-reported slack			1.30 (0.14) $P = .03$	1.20 (0.15) $P = .14$	0.89 (0.17) $P = .42$			
Organization headcount	2.89 (0.72) $P = .05$	2.57 (0.75) P = .10	1.93 (0.76) $P = .23$	1.37 (0.84) $P = .63$	0.78 (0.91) P = .72	0.46 (1.02) $P = .34$		
Collaboration requirement	0.90 (0.14) $P = .38$	0.90 (0.14) $P = .38$	0.90 (0.14) $P = .36$	0.92 (0.14) $P = .46$	0.84 (0.16) $P = .24$	0.89 (0.16) $P = .38$		
Analysis, research and data	1.08 (0.20) P = .68	1.08 (0.20) $P = .70$	1.10 (0.20) $P = .61$	1.03 (0.20) $P = .87$	0.91 (0.22) $P = .61$	0.86 (0.22) $P = .47$		
Clarify and disclose	1.24 (0.19) P = .24	1.24 (0.19) $P = .25$	1.25 (0.19) $P = .23$	1.21 (0.19) $P = .30$	1.03 (0.21) $P = .89$	0.95 (0.22) $P = .80$		
Guidance and control	1.24 (0.20) P = .26	1.23 (0.20) $P = .27$	1.27 (0.20) $P = .21$	1.20 (0.20) $P = .33$	1.05 (0.22) $P = .78$	1.06 (0.22) $P = .77$		
Internal management	1.37 (0.21) P = .09	1.36 (0.21) $P = .11$	1.40 (0.21) $P = .08$	1.34 (0.21) $P = .12$	1.11 $(0.24)$ $P = .62$	1.11 (0.24) $P = .63$		
Not actionable	1.12 (0.33) P = .72	1.11 (0.32) $P = .75$	1.12 (0.32) $P = .73$	1.10 (0.33) $P = .77$	1.02 (0.36) P = .96	1.06 (0.37) P = .87		
Organization fixed- effect	Yes	Yes	Yes	Yes	Yes	Yes		
Year fixed-effect	Yes	Yes	Yes	Yes	Yes	Yes		
SE clustered by	Rec.	Rec.	Rec.	Rec.	Rec.	Rec.		
Observations	1,770	1,770	1,770	1,770	1,554	1,554		
$R^2$	0.09	0.08	0.08	0.10	0.09	0.09		

cross-governmental remit of this committee and the enormous information required to make such slack-contingent recommendations. Indeed, when we tested for factors predicting the number of requests issued by the PAC to each organization, only one of our four slack measures—the budgetary increase dummy-proved a significant predictor of committee attention (see Appendix VII). And this may simply reflect the PAC's particular interest in the government's policy priorities (which received additional budget during a period of general retrenchment), rather than any extensive "insider knowledge" on slack capacity in particular agencies. Alternatively, completed assignments may generate in-year productivity gains, adding to spare resources. Like other empirical studies of slack, we rely on lagged variables to control for this possibility, though this is more suited to H1 and H2 than to the multi-year survival analysis used for H3.

Finally, while our dataset is highly distinctive in current empirical literature, its dependence on the value-for-money regime of the NAO and PAC may limit generalizability. These bodies perform both control and accountability functions, and may elicit blame-avoidance and reputation management responses from government. In addition, the legislative requests that we monitor are fairly "technocratic" in nature, and it remains unclear whether slack resourcing will be as

significant a predictor of bureaucratic responsiveness to more ideologically-driven policy change.

#### Conclusion

The arrival of agency theory into the political bureaucracy literature in the 1970s advanced scholarship into political-administrative relations markedly (Brierley et al. 2023; Miller 2005; Moe 2012). Wood (2010, p. 201) even credits agency theory with having "moved the field some distance toward the type of science practiced in other disciplines." Yet, even among its staunch proponents, the need to look beyond agency theory has latterly been conceded. Indeed, Moe (1984, 2012) has twice called upon political scientists to expand into more theoretically "eclectic" territory, cautioning that "the delegation literature has focused all its attention on the information problem and brushed capacity aside" (2012, p. 31).

Innovative research, beginning with Huber and McCarty (2004), has begun to address this imbalance (Bednar 2023; Bednar and Lewis 2024; Bolton and Thrower 2022; Bolton, Potter, and Thrower 2016; Boushey and McGrath 2017; Dasgupta and Kapur 2020; Drolc and Keiser 2020; Gailmard and Patty 2013; Hausman et al. 2023; McGrath 2013). And it is to this emerging literature that we have sought to contribute,

not only by providing a rare quantitative analysis of bureaucratic responsiveness in a non-US, non-presidential context, but also by reconnecting political science with management theory. Specifically, we have sought a more authentic account of how bureaucracies with enduring policy commitments can be rendered more or less responsive to democratic overseers based not on organizational capacity in general, but the presence or absence of slack resources in particular.

We find strong empirical support for this argument. Budgetary and worker-reported slack significantly aid bureaucracies in consenting to political requests for change, committing to those assignments, and/or implementing them in a timely fashion. Future work should look to replicate these findings in other contexts and with similar or improved measures of slack, which remains an elusive concept to operationalize. More work is also needed on potential interactions between different subtypes of slack (Marlin and Geiger 2015). And qualitative research should elucidate the mechanisms by which surplus resources enable bureaucratic responsiveness, and the reasons for different effect sizes across slack subtypes.

Many theoretical opportunities are presented, too. As noted at the outset, the aim is to enhance rather than replace agency explanations. Boehmke and Shipan's (2015, p. 371) argument that, "to fully understand political influence over agencies, we need to examine the interaction between preferences and capacity" (original emphasis), applies to bureaucracies as much as to the time-poor legislatures about which they were writing. One priority is to better understand the origins of organizational slack in government bureaucracies. For example, as Moulick and Taylor (2017) argue, recoverable slack is more easily "hidden" from overseers than available slack, meaning that it is more easily protected from top-down budget cuts. And beyond the appropriations process, slack also depends on the fixity of the bureaucracy's current programs. If both principal and agent are willing to sacrifice performance on past commitments, then a surplus can be created with which to fund new objectives. Indeed, this is consistent with Suzanne Mettler's (2016, p. 371) argument that, so vast has the "policyscape" of accumulated commitments become, "policymakers have failed to maintain the majority of existing laws...." On the other hand, if principal and agent disagree about the value or necessity of maintaining prior commitments, then a secondorder agency problem arises. Now, control is hindered not by disputes over the new policy direction, but rather by disagreement over how to free-up the resources needed to proceed. This seems especially likely at moments of political transition from one governing party to another, and in highly institutionalized bureaucracies with low staff turnover.

Most of all, prosecuting this research agenda relies on new interdisciplinarity between political science and general management; for the ambition is, as Moe (2012, p. 34) argues, to re-engage with "the organizational aspects of bureaucracy [that] have gotten organized out of the formal theory."

# **Supplementary Material**

All appendixes are available at the Journal of Public Administration Research and Theory online.

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#### **Data Availability**

Data and code can be downloaded from the UK Data Service (DOI: 10.5255/UKDA-SN-857975).

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