Bureaucratic Turnover Under New Governments: The moderating effect of organizational buffering

Bjørn Mo Forum*

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Abstract

Politically motivated personnel turnover can impact both the legitimacy and the performance of public bureaucracies. Yet, knowledge of how deep into the ministerial hierarchy politicization of top bureaucrat appointments runs in merit bureaucracies is scares. This paper uses a new dataset of 933 bureaucrats at the top two ranks in Norwegian ministries between 1884 and 2024 to explore how variability in organizational buffering between the minister and the bureaucrats moderates the impact of a change of government on bureaucratic turnover. The results of the event-history analysis show that top bureaucrats who have a layer of bureaucratic employment as an organizational buffer between them and the minister do not have a higher risk of turnover after a change in government. In contrast, bureaucrats at the top of the administrative hierarchy are at increased risk of turnover after a change in government. However, when organizational buffering takes the form of political appointees between the highest rank of top bureaucrats and the minister, the effect runs opposite, only increasing top bureaucrat turnover in periods when the steering of the ministries is politicized by the employment of political appointees. The analysis finds that the moderating effect of organizational buffering is driven by the implementation of a new more functionally politicized bureaucratic position at the top of the ministerial hierarchy. This permanent secretary position is the only one in which the probability of turnover is higher following a change in government. These findings have implications for when the institutions of merit recruitment are deviated from by new governments.

1 Introduction

Countries with merit-based administrative traditions have a formally depoliticized civil service where personnel decisions are made purely on the basis of professional competence and achievements. However, in the last decade, scholars have shown that political change and personnel changes in the civil service are

*PhD Research Fellow, Department of Political Science, University of Oslo. Email: b.m.forum@stv.uio.no

not independent of each other. Rather, government turnover co-occurs with changes in the patterns of top bureaucrats[1] leaving their positions in meritocratic administrative systems (Askim et al., 2022; Christensen et al., 2014; Cooper, 2017, 2020; Dahlström & Holmgren, 2019; Forum, 2022).

The interdependence of the turnover of political principals and bureaucratic agents can have positive (Ebinger et al., 2019; Fiva et al., 2021; Goetz, 1997) and negative effects (Askim & Bach, 2021; Fuenzalida & Riccucci, 2019; Kim et al., 2021; Meyer-Sahling et al., 2018) depending on the institutional characteristics of the political-administrative context. Negative effects such as a higher level of corruption and a less competent and worse performing civil service are largely related to the politicization[2] of turnover to reward political allies. The positive aspects of politicized turnover are connected to the political dimension of the bureaucratic position, where preference alignment between the bureaucrat and the political principal may increase performance, or to bureaucrats with a hybrid career of both politics and administration having competence to provide political-tactical advice, along with traditional managerial skills and sector-specific knowledge.

Attempts to depoliticize the selection of top bureaucrats with civil service legislation against political discretion have not been found to have clear effects at the highest level in politicized systems (Gajduschek & Staronova, 2021; Rybar & Podmanik, 2020). Similarly, most of the research on political change and top bureaucrat careers in established merit-based systems still finds a connection at the top levels of ministerial and agency hierarchies. With politically motivated personnel turnover within the civil service having the potential to both benefit and damage government performance, and formal institutions against politicization not breaking the connection between political turnover and top bureaucrat turnover, it is important to broaden our knowledge of the political dynamics of bureaucratic turnover under meritocratic constraints. Research has largely expected the effects of political change on top bureaucrats to be the same regardless of variability in the bureaucratic position. This paper challenges this assumption by looking at whether this relationship also exists for top bureaucrat positions that are appointed by the minister but have more organizational buffering between them and the political executive. Hence, this paper asks whether organizational buffering between bureaucrats and ministers moderates the initial effect of a change in government on bureaucratic turnover?

Empirically, the paper draws on a large new dataset of political events and the top two ranks of bureaucrats in Norwegian ministries 1884-2022 to show how deep into the ministerial hierarchy politicization runs in systems with a merit civil service system. Norway is considered an example of a European parliamentary system, with a classical ministerial structure and a separation of politics and administration that is comparable to Westminster systems and other countries in the Nordic administrative tradition (Cooper, 2021). The Norwegian political and civil service system has remained fairly unchanged since the introduction of parliamentarism in 1884. This allows the article to draw on a large number of top bureaucrat careers and

[1] Defined as a collective term for the most senior bureaucrats in a government ministry or arm's-length agency under the authority of a minister that are not politically appointed (Bach, 2020, p. 36).

[2] Commonly defined as "the substitution of political criteria for merit-based criteria in the selection, retention, promotion, rewards, and disciplining members of the public service" (Peters & Pierre, 2004, p. 2). This article will use the term more broadly to refer to any use of political criteria in public service turnover decisions.

political events that are comparable over time. In addition, there have been two major changes in the ministerial hierarchy in this period that are useful for studying how organizational buffering impacts the turnover of top bureaucrats. On the one hand, Norway introduced permanent secretaries as the highest level of top bureaucrat in all ministries between 1922 and 1987. On the other hand, political state secretaries were implemented in all ministries between 1947 and the early 1970s. Norway thus serves as a good case to study if hierarchical distance between top bureaucrats and the minister buffer top bureaucrats from politicized turnover.

2 Politicized Turnover in Meritocratic Systems

When entering office, ministers are faced with a delegation problem: they must rely on bureaucrats to draft and implement the government's desired policy, but cannot be certain that agents share the same preferences as the government and that they will not attempt to move policy toward their own preferences (Bach, 2020; Gherghina & Kopecky, 2016). To combat this risk, political selection and deselection of top bureaucrats can be used to improve the administration's responsiveness to the governments political agenda (Limbocker et al., 2022). In doing so, ministers may generally want to hire staff with "particular professional qualifications that are traditionally not provided for by the ministerial bureaucracy (professionalization) or merely staff which the minister prefers as advisers from a personal point of view (personalization)" (Hustedt & Salomonsen, 2014, p. 749). Politicization may also take the form of patronage appointments motivated by rewarding partisan or non-partisan allies (Panizza et al., 2019).

Politicization of administrative turnover in a formally politicized context involves *substitution* of merit-based criteria for political criteria (Peters & Pierre, 2004). If a position is formally politicized, then turnover after a change in government is a swift process, unless appointments need to pass the scrutiny of parliament (Limbocker et al., 2022). The US and European countries in the Napoleonic, Central European, or Continental Administrative tradition are systematically more politicized—with a larger number of politically appointed bureaucratic positions and party political association being more common among bureaucrats in these countries—compared to countries in the Nordic and Westminster administrative traditions (Bach et al., 2020). Studies in these contexts have largely found that new governments use their formal discretion to politically replace top bureaucrats for political control or patronage (Fleischer, 2016; Lewis, 2008; Panizza et al., 2019; Staronova & Rybar, 2021; Wood & Waterman, 1991). In Germany, for example, where the top two ranks of the departmental hierarchy are political appointees, between 50-70% of all top bureaucrats are removed after a change in government (Fleischer, 2016). As the political costs of replacing top bureaucrats that are political appointees are the same regardless of hierarchical placement, this has not received attention in this context. Rather, the focus has been on the characteristics of the appointed (Hong & Kim, 2019; Staronova & Rybar, 2021) and the purpose (Doherty et al., 2019; Staroňová & Rybář, 2023) and the effects of the appointments (Peters

et al., 2022; Piper & Lewis, 2022; Story et al., 2023).

The politicization of bureaucratic turnover in merit-based civil service systems involves political criteria being *additive* considerations for ministers' selection and dismissal of top bureaucrats, since any appointment must be formally defensible by merit (Askim & Bach, 2021). The level of trust between the minister and top bureaucrats is also generally high in these countries. This is in part due to institutionalized merit-based recruitment and dismissal practices that ensure that top bureaucrats in the ministry are highly qualified and capable of supporting the minister regardless of their political agenda (Jacobsen, 1960; Trangbæk, 2021). Simultaneously, these established practices and formal rules against politicizing top bureaucrat recruitment and dismissal also limit the discretion of the ministers to replace top bureaucrats they find to be less responsive to the implementation of their political agenda. This constraint limits the degree to which pure patronage appointments are made (Allern, 2012), but it does not change the incentives of politicians to use appointments to seek political control over the ministry or to ensure that the bureaucracy does not actively work against the new government's agenda when transforming politics into administrative action (Christensen et al., 2014). Consequently, the total number of top bureaucrats who leave the ministries or are reassigned after a change in government is quite small compared to countries with formally politicized recruitment and dismissal (Hustedt & Salomonsen, 2014).

The degree to which ministers can act on preferences to remove unwanted top bureaucrats depends on the pressure they can impose on them to resign (Peters et al., 2022, p. 37), and on how they react (Limbocker et al., 2022). In other words, the minister must rely on top bureaucrats being functionally politicized to be responsive to political dismissal requests (Hustedt & Salomonsen, 2014). Furthermore, the minister must evaluate the costs of the move in the eyes of the public, which can depend on the top bureaucrat leaving willingly.

Although top bureaucrats are not required to submit to dismissal requests from ministers, empirical studies have shown that top bureaucrats are loyal to the minister's decisions even in these situations (Rhodes, 2005, p. 15). Having the ministers' trust is a necessity to be kept in the loop and carry out the responsibility of a top bureaucrat (Ebinger et al., 2019, p. 868). Furthermore, as Rhodes (2005, pp. 15–16) notes, top bureaucrats are socialized to believe that "the greatest crime in the civil service canon is to betray one's minister." Hence, if top bureaucrats receive notice from the minister of no longer being wanted, they will likely not only comply, but do so gracefully, setting the minister and their replacement up for success during the transitional time.

When the top bureaucrats have served under a minister from the same party as the incoming minister, the new minister should largely trust that the top bureaucrats are responsive to the political agenda of the government. Just a change in the minister (Ennser-Jedenastik, 2014; Staronova & Rybar, 2021) and dissimilarities in personal characteristics between the minister and the top bureaucrat (Gron et al., 2021) can result in an increased turnover rate among bureaucrats (Ennser-Jedenastik, 2014; Staronova & Rybar, 2021), but empirical evidence of such political change impacting top bureaucrat turnover has not been found in the meritocratic context (Askim et al., 2022; Cooper, 2020; Kopecky et al., 2016). Guided by these findings, the focus

of this article is put on how a wholesale government turnover[3] affects the turnover rates of top bureaucrats and how the administrative hierarchy can affect this relationship.

Barring the case of government turnover not affecting the tenure of permanent secretaries in Denmark (Askim et al., 2022; Christensen et al., 2014), research on the effect of government turnover has consistently found that a change in government leads to higher turnover rates among top bureaucrats in ministries in meritocratic systems (Askim et al., 2022; Cooper, 2017; Cooper et al., 2020). The literature proposes two general explanations to tie the change in government to the increase in top bureaucrat turnover: one of politicized turnover (Askim et al., 2022; Cooper, 2020) and one of bureaucratic self-selection (Geys et al., 2023; Rattus & Randma-Liiv, 2019).

The politicized turnover perspective highlights that a change in government involves not only a change in the person controlling the ministry but also an ideological change. To maximize their policy gains and minimize their monitoring costs by delegating tasks to top bureaucrats, governments seek to follow the logic of the ally principle: that they can delegate more autonomy to top bureaucrats the greater their ideological agreement (Ennser-Jedenastik, 2016b, p. 454). Therefore, new ministers are expected to have lower levels of trust in the incumbent top bureaucrats, even if they are expected to be loyal and responsive to the at any point sitting government (Hustedt & Salomonsen, 2014, p. 750).

On the other hand, a bureaucratic strategic-exit or self-selection perspective places emphasis on how the ideological change in government affects the preference of the incumbent top bureaucrats to stay or leave their positions (Doherty et al., 2019). The top bureaucrats who do not share the new government's policy preferences may leave their positions of their own accord after an ideological change in government, as they may no longer be able to pursue their preferred policy solutions (Rattus & Randma-Liiv, 2019). Furthermore, political shifts cause the work load of the top bureaucrats to increase (Rhodes, 2005, p. 8), which alone can increase the likelihood that top bureaucrats leave their position of their own accord.

In either perspective, a change in government that brings all new ministers from new parties—and thus constitutes an ideological change in the policy agenda in the ministries—should increase the rates at which top bureaucrats leave their positions, but it should not be expected to impact all top bureaucrats equally. As the next section will posit, the organizational buffering between them and the minister should be expected to impact ministers payoff from politicizing turnover, while this should not have a differential impact on strategic exits.

2.1 Hypotheses

Taking the assumption of the politicized perspective that, barring political dismissal, bureaucrats would like to keep their positions at the same rates following a change in political leadership (Cooper, 2020), focus can

[3] A change in government that involves a change in the party that holds the Prime Ministers Office, and thus also a turnover of the cabinet in its entirety, with or without an election.

be placed on how organizational buffering impacts the strategic choice that new ministers face when taking control of their ministry.

Ministries have evolved over time to be complex organizations in terms of areas of responsibility and the number of bureaucrats they encompass. Ministerial bureaucracies are hierarchical authority structures with a clear functional division of labor (Olsen, 2008). The authority and responsibility for the policy output of the ministry lies with the minister at the top of the hierarchy; however, the minister cannot make well-informed use of that authority without delegating the responsibility for information gathering, proposal drafting, budgeting, consequence analysis, etc. to bureaucrats. Thus, one can think of ministerial hierarchies as chains of delegation: first from the minister (level 0) as the principal to the highest level of bureaucrats in the ministerial hierarchy (level-1) as agents, then from level-1 bureaucrats as principals to level-2 bureaucrats as agents, and so on down to the task specialized bureaucrats at the bottom of the hierarchy (Level N). Figure 1 illustrates these direct and indirect principal-agent relationships for a ministry with 3 hierarchical levels, with i being the unit identifier for each bureaucrat horizontally placed within the hierarchical level. The figure shows that level-1 bureaucrats are direct agents of the minister, while level-2 bureaucrats are only indirect agents, as the level-1 bureaucrat acts as an organizational buffer between them and the minister.

When ministries reach a certain size, it can be necessary to streamline the chain of command by introducing new hierarchical levels that limit the number of top bureaucrats that are directly controlled by the minister. Going down the hierarchy, the delegated policy area and function of the bureaucrat becomes more specific; conversely, the authority increases as their hierarchical distance to the minister decreases. level-1 bureaucrats function as the administrative leader(s) of the ministry – heading the other top bureaucrats and being the ministers primary resource for steering the ministries administrative capabilities to implement their political agenda (Christensen et al., 2014). Top bureaucrats at this level have more direct interactions with the minister, as there are no intermediaries between them and the minister.

Whereas all top bureaucrats interact with the minister directly on a regular basis, the top bureaucrats that are the direct agents of the minister have to be accountable to the minister for all decisions that the ministerial bureaucracy makes. Furthermore, these top bureaucrats provide more holistic political-tactical advice, than the more professional and area-specific policy expertise of level-2 bureaucrats that usually head ministry departments (Christensen et al., 2014, p. 217).

The turnover of governments causes an immediate change in the preferred political output of ministries, and thus the policy advice and solutions that the top bureaucrats are supposed to pursue in the day-to-day governance of the ministry. Although top bureaucrats have been found to change their behavior once the party that appointed them is out of office (Geys et al., 2024; Harris et al., 2022), they have their own policy preferences that may be more or less aligned with those of a government (Dahlström & Holmgren, 2019).

A minister motivated by reelection can be expected to want to maximize the policy responsiveness, loyalty, and political and administrative competence of the bureaucracy (Strom, 1990). When entering office,

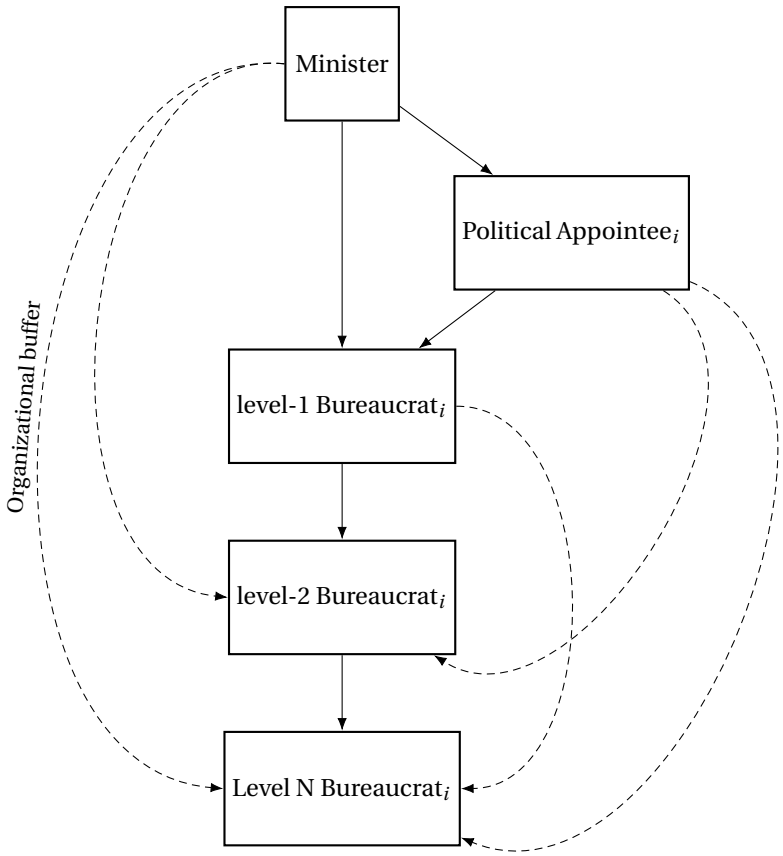


Figure 1: Visualization of the chains of principal-agent relationships in ministries. Direct principal-agent relationships are denoted by solid lines, indirect agents are denoted with dashed lines, and the subscript i highlights that there can be multiple bureaucrats at each hierarchical level.

ministers must make a series of choices when selecting bureaucratic agents. For each choice, the minister is faced with an incumbent agent which they can choose to keep or which they can replace with another candidate. Since there will be information asymmetry between the minister and the agent with regard to the agents loyalty, responsiveness, and competence in carrying out their delegated task, the minister wants to avoid adverse selection (Miller, 2005). In assessing the agents' preference congruence with the government, the minister is assumed to be a generalist career politician with limited subject and managerial expertise to draw upon when assessing the incumbent agent and the pool of candidates. If it were not for the minister's preference for maximizing not only loyalty and responsiveness, but also competence, the chance for adverse selection would be low, as the minister could just install a trusted partisan in the position.

The time budgets of new ministers to acquire knowledge about bureaucrats before making changes are short, as it is important for new governments to quickly transition into implementing their policy agenda (Goetz, 2014). Following this logic, it is likely that it will take the minister more time to get enough information about the compatibility of bureaucrats below level-1 to make a decision on whether they want to replace them. Thus, these top bureaucrats are less likely to be impacted by a political change in the minister.

Part of the competence term to be maximize also includes institutional knowledge, the tacit knowledge of how the ministry functions, that the minister does not want to lose when selecting agents. This points towards diminishing returns when replacing agents, as each agent replaced reduces the total level of institutional knowledge that is kept. Recruiting from within the ministries may partly remedy this issue, but as this involves recruiting from the lower ranks of the ministry these employees' competences in the top bureaucrat position will still be lower at the start, and come with transaction costs when getting up to speed with how to carry out their new position.

Level-1 agents can also police the work of level-2 agents for the principal, limiting the impact of adverse selection of level-2 agents.

The existence of rules and norms against politically motivated turnover of top bureaucrats should also be expected to constrain the minister to prioritize the replacement of the most important ideologically incompatible bureaucrats. This can be seen as an additive contextual constraint.

In other words, limits to the ministers ability to assess preferences and avoid adverse selection, as well as diminishing returns when replacing agents, point toward the minister benefiting from focusing their politicized replacement of top bureaucrats to the positions with the highest payoff. With ministries being bureaucracies with a hierarchical structure, the minister should benefit more from replacing bureaucrats at level-1 than at level-2 and so forth; hence, the following hypothesis can be posed:

H1: *The marginal effect of a change in government on bureaucratic turnover is* ***positive*** *when organizational buffering is at its lowest level. This effect declines in magnitude as organizational buffering* ***increases****; at some value of organizational buffering, a change in government has no effect on bureaucratic turnover.*

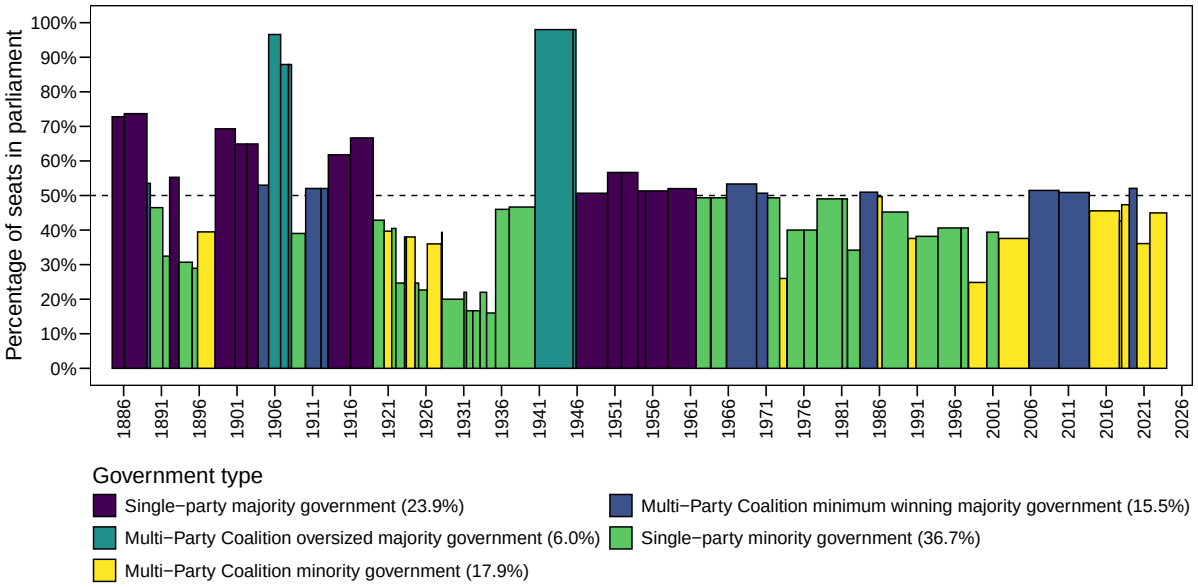


Figure 2: Types of government in Norway 1884-2024

3 The Research Context

Neither the king, the prime minister nor the parliament can dissolve the parliament and call general elections in Norway. General elections[4]are held at fixed intervals, taking place in September every four years – until 1936 every three years. If a government turnover occurs after a general election, the norm is for the change in government to take place as soon as the sitting government has submitted its budget proposal for the coming year, usually in the middle of October (Regjeringen, 2021).

There were 36 instances of government turnover—where there was a change in the party of the prime minister—between 1884 and 2024. 20 of these changes in government occurred without an election. Figure 2 gives an overview of the parliamentary support for these governments as well as their length over time. About 72% of the governments formed have been minority governments, accounting for 54.2% of the days between 1884-2024. Furthermore, about 55% of the governments have been single party governments, accounting for 61% of the years in the period.

The formal decision-making power to appoint and dismiss top bureaucrats is held by the King in Council. The cabinet makes appointment decisions in its King in Council sessions that are formalized by resolutions of royal decree as put forward in §§21-22 of the Norwegian Constitution (Grunnloven, 1814). This formal decision-making power was in the hands of the Swedish King until the end of the union (1905) (Kolsrud, 2001, p. 52).

Legal custom since the 1890s (Jacobsen, 1955), and civil service legislation since 2017 (Borgerud et al., 2020) have prohibited governments use of political criteria as the formal reason for the removal or recruitment

[4]The electoral system changed from a system of indirect elections with plurality rule in 1814, to direct elections in single-member districts between 1906-1918, replaced with a multi-member districts closed-list proportional representation system since 1918 (Fiva & Smith, 2017).

of civil service members. However, the minister decides which qualifications should be considered when appointments are made to top bureaucrat positions and ultimately selects the candidate to be appointed by the cabinet (Borgerud et al., 2020, p. 58).

Top bureaucrats can be dismissed by royal decree (Grunnloven, 1814), although this rarely happens in practice, as it would not only result in negative attention towards the government, but also hurt the dismissed top bureaucrat's future career. One of few examples of a top bureaucrat being forced out, but not leaving quietly was Anne Marie Storli who in 2015 was asked to resign as Director General of the Communication Department in the Ministry of Transport after policy disagreement with the minister. After taking the incident public, she later stated that the decision ruined her career (Aftenposten, 2016).

Top bureaucrats in Norway tend to prefer a gracious exit, often with a cooling period as a special advisor in a ministry before pursuing another top position or retirement. Between 2011 and 2024 20% (33/173) of the dismissed top bureaucrats went directly into a special advisor position, whereas 22% (38/173) went into early retirement. Table 1 shows that there is little variance between level-1 and level-2 bureaucrats when it comes to the type of position they go to after their time at the top of the ministerial hierarchy. However, 12.3% more level 1 bureaucrats retire when exiting their positions compared to level 2 bureaucrats, and a higher share of level 1 bureaucrats continue as special advisors in the ministries. Level-2 bureaucrats on the other hand are more likely to change employment sector.

Table 1: Next position for top bureaucrats that left office between 2011-2024

	next_position_sector	Level-1	Level-2
1	Central Administration (Agencies)	2 (6.9%)	18 (11.6%)
2	Central Administration (Foreign Service)	6 (20.7%)	32 (20.6%)
3	Central Administration (Ministries)		17 (11%)
4	Central Administration (Ministries: Special Advisor)	9 (31%)	28 (18.1%)
5	Dead		1 (0.6%)
6	International Organization	1 (3.4%)	1 (0.6%)
7	Local Administration		5 (3.2%)
8	Nonprofit Sector	1 (3.4%)	3 (1.9%)
9	Politics		5 (3.2%)
10	Private Sector		7 (4.5%)
11	Retirement	9 (31%)	29 (18.7%)
12	State-Owned Enterprises	1 (3.4%)	9 (5.8%)
13	Total	29 (100%)	155 (100%)

Norway having a meritocratic administrative systems adds additional constraints on the politicization behavior of the new ministers. These constraints add costs to replacement as ministers are not allowed to employ political criteria. This makes Norway a least likely case to observe a connection between political change and bureaucratic turnover. Consequently, this also makes Norway a most likely test for organizational buffering limiting the connection between new governments taking power and turnover. This may limit generalization of the findings to contexts with similar formal rules and norms against politicization as Norway, however, importantly this should also indicate that such rules do matter in limiting, but not completely

removing, politicization of bureaucratic appointments for control of the bureaucracy.

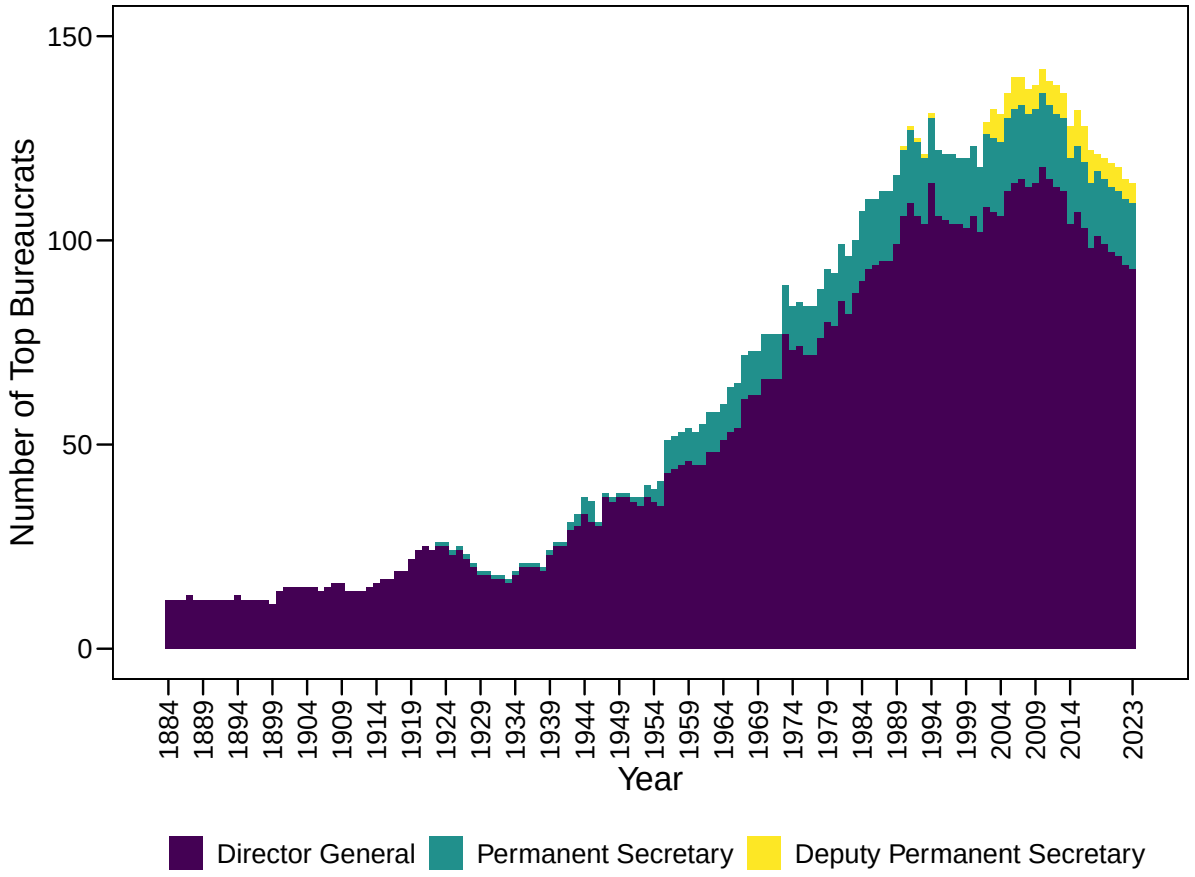
4 Data

The paper tests the effects of organizational buffering using data on government turnover and three types of top bureaucrat positions employed at the top 2 levels in Norwegian ministries between 1884 and 2024.[5]The dataset consists of 926 different people that held top bureaucrat positions throughout the period. The primary source of data on when top bureaucrats where in office is the yearly published Norwegian register of government employees, *Statskalenderen* (Regjeringen, 1877–2011). The final publication year of the register of government employees was 2011, hence data on top bureaucrats in the 2012-2024 period has been scraped from the minutes of government council meetings, *Offisielt frå statsrådet* (Regjeringen, 1994–2022). Since the minutes from government meetings only give information about the appointment of new top bureaucrats, and not exit times, this has been coded manually using archived government webpages ("Wayback Machine," 2023), Linkedin, newspaper archives, and official documents such as department-agency contracts or responses to public hearings signed by the top bureaucrat with their official title to figure out when they are still in office.

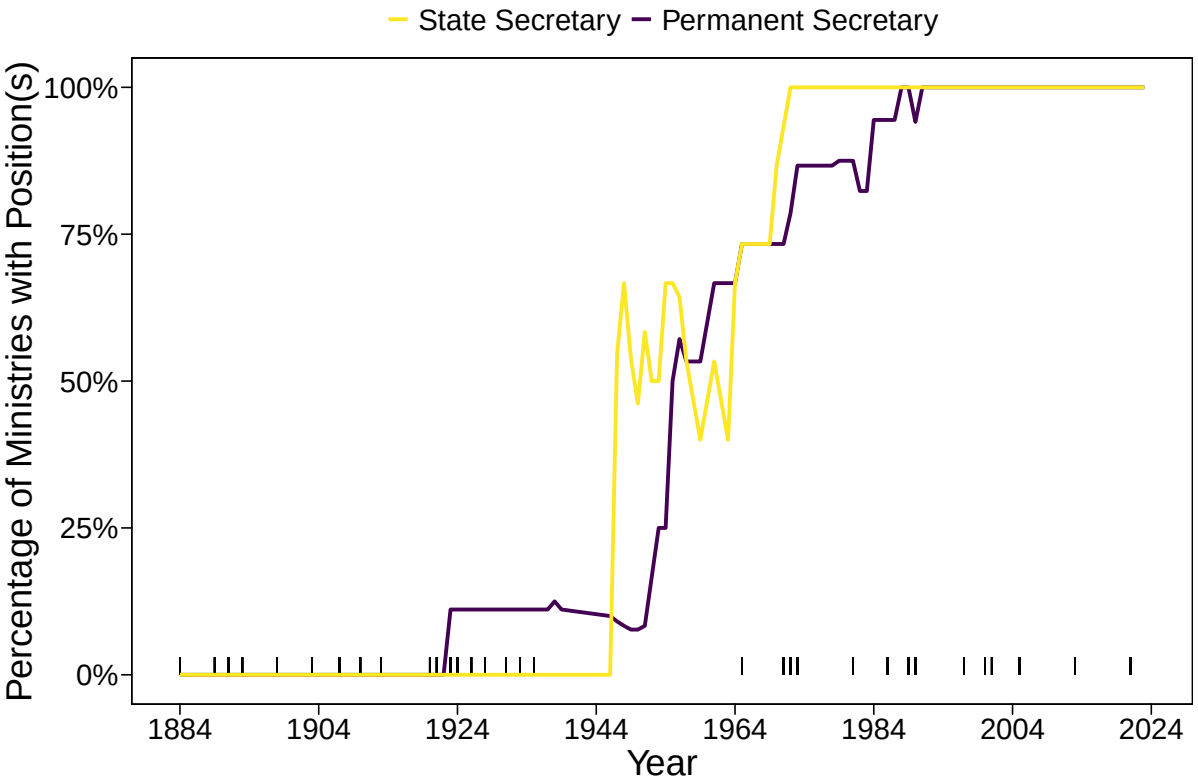
As can be gleaned from figure 3a and figure 3b Norwegian ministries gradually employed permanent secretaries in all ministries in the first 40 years of the post-WWII period (Eriksen, 1988, pp. 77–78), although the Ministry of Foreign Affairs had employed a Permanent Secretary since 1922. Permanent secretaries where gradually introduced as the highest level of top bureaucrat in all ministries between 1922 and 1987. Prior to this the responsibility as the administrative leader of a ministry was shared between one or more directors general until the position of permanent secretary was implemented as the administrative leader of the ministry. Furthermore, figure 3a shows that some ministries also appoint deputy permanent secretaries from 1989 and onward, these bureaucrats are considered as level-2 bureaucrats.

Political appointees to aid ministers with day to day affairs and provide political tactical advice was first introduced in Norway in the post-WWII period. The newly elected Labour party single majority government in 1945 set out to rebuild the country after the war, seeking not only to reestablish the pre-war status quo, but also to implement major policy-reforms (i.e. long-term economic planning), and to achieve this, they wanted to increase administrative and political capacity (Grønlie, 2009). Through reorganization and administrative reforms, the government sought to reorganize, effectivize, and increase the political responsiveness of the central administration – a central administration more fit for policy-making. Figure 3b shows how Norway gradually introduced permanent secretaries as the highest level of top bureaucrat in all ministries between 1922 and 1987. Politically appointed state secretaries where on the other hand quickly employed in over half of the ministries following their legal introduction in 1947, and at least 1 state secretary have been employed

[5]This entails the Directors General of Ministry Departments (Ekspedisjonssjefer/Ekspedisjonssekretærer), the Deputy Permanent Secretaries (Assisterende departementsråder) and the Permanent Secretaries (Departementsråder).



(a) The number of top bureaucrats in Norwegian ministries 1884-2024 subset by position.



(b) The Percentage of ministries employing at least 1 state secretary and/or 1 permanent secretary over time. Vertical bars on the x-axis denotes years with government turnover.

Figure 3: Change in number and type of positions over time.

in all ministries since the 1970s.

5 Methods and model

To test the hypotheses of organizational buffering moderating the effect of government turnover on bureaucratic turnover two different specifications of the regression model in equation 1 are estimated using Ordinary Least Squares Regression (OLS). First, the paper looks at how organizational buffer$_{it}$ in the form of *bureaucratic buffering*, defined as the existence of one or multiple bureaucratic organizational levels between a top bureaucrat and the minister, impacts the connection between government turnover and bureaucratic turnover. Where the variable bureaucratic buffer$_{it}$ distinguishes between level-1 bureaucrats, that is top bureaucrats that are hierarchically placed directly under a cabinet minister (directors general and permanent secretaries) in a year t and thus have no bureaucratic buffer, and level 2 bureaucrats, meaning director generals and deputy permanent secretaries that had a permanent secretary as a buffer between them and the minister in the ministerial hierarchy in year t. Second, *political buffering* is considered for with the introduction of a new politically appointed organizational level above the level-1 bureaucrats. *Political buffer*$_{it}$ is operationalized as a dummy variable. The variable distinguishes between level-1 bureaucrats in years where at least one political state secretary was employed in their ministry in year t (1) and level-1 bureaucrats employed in ministries with zero political state secretaries in a year t.

$$\begin{aligned} \text{top bureaucrat turnover}_{it} = {} & \alpha \cdot \text{government turnover}_{t} + \beta \cdot \text{organizational buffer}_{it} \\ & + \delta \cdot \text{government turnover}_{t} \cdot \text{organizational buffer}_{it} \\ & + \tau \cdot \text{time}_{it} + \zeta \cdot \text{decade}_{t} + \eta \cdot \text{ministry}_{it} \\ & + \theta_{\mathbf{c_{it}}} + \varepsilon_{it} \end{aligned} \tag{1}$$

Following the methodology of Askim et al. (2022, p. 14), *Government turnover* is operationalized as wholesale change of government in year t, where all ministers are replaced simultaneously as a result of a change in the party of the prime minister. Data on ministers' and governments' tenure in Norwegian ministries are collected from the NSD database on Ministers in Norway (Sikt, 2024b), and government webpages. As the purpose of the variable is to see how turnover rates among top bureaucrats are affected by having to work for a new minister from a new party, no distinction between the change in the party of the prime minister taking place after an election or as a result of the opposition being able to form a new government in between election years is made. Likewise no distinction is made between the appointing and dismissing party, and changes of just the minister within the same government is excluded from the variable. However, to check the robustness of the findings and explore the potential mechanisms of the conditional effect of political change dependent on the level of organizational buffering on top bureaucrat turnover other operationalizations and the moderating effect of elections are also considered.

The marginal effects of interest is $\alpha \cdot$government turnover$_t + \delta \cdot$government turnover$_t \cdot$organizational buffer$_{it}$. That is the effect of a change in government (difference between a year with government turnover and a regular year) conditional on the level of organizational buffering (Brambor et al., 2006). Moreover $\delta \cdot$ government turnover$_t \cdot$organizational buffer$_{it}$ is a quantity of interest as the difference-in-differences estimate of the effect size of government turnover for top bureaucrats with vs. without organizational buffering.

5.1 Dependent Variable

The unit of observation is individual-year, with 1 observation per individual i that inhabits a top bureaucrat position at the start of year t (January 1st). The outcome of interest is top bureaucrat turnover$_{it}$, that is the replacement or exit of a bureaucrat i in year t. Following the methodology of Askim et al. (2022) the top bureaucrats are organized in continuous employment spells j.[6] Formally *top bureaucrat turnover* is defined as:

$$\text{top bureaucrat turnover}_{ijt} = \begin{cases} 1 & \iff \max(\text{t}_{ij}) = t_{ij} \;\&\; \text{age}_{ijt} < 70 \;\&\; \max(\text{t}_{ij}) \neq \max(\text{t}) \\ 0 & \text{otherwise} \end{cases} \tag{2}$$

Where an employment spell j is only considered to have ended if the top bureaucrat i that held a position in year t no longer holds any of the top bureaucrat positions in year $t+1$. In other words, if a top bureaucrat, for instance, holds a position as director general in the Ministry of Finance in 1980, but is reshuffled into position as director general in the Ministry of Foreign Affairs in 1981, this is counted as a continuous employment spell, and not top bureaucrat turnover. Similarly, if an individual goes from being a director general in year t to becoming a permanent secretary in year $t+1$ or vice versa, this is not considered to end the employment spell. Moreover, as the formal retirement age in the public sector in Norway is 70 all top bureaucrats who are still in office the year they turn 70 are right-censored, as they would need to leave their position that year regardless of any confounding political changes (Christensen et al., 2014). The individuals that still held their position per 31.12.2023 are also right-censored at this points in time. The models are also estimated with alternative operationalizations of employment spells that loosens these restrictions on what constituted turnover as a robustness test.

This results in 1079 employment spells, of which 898 ended during the observation period. 72 employment spells were right censored due to lasting until the retirement age. 304 people had employment spells that involved a top bureaucrat position that was hierarchically placed directly under the minister. 136 people had more than one employment spell, and 15 people had 3-5 employment spells. An example of this is Erik Himle, who had the most employment spells as he had breaks from his civil service career to take multiple political positions as state secretary and minister.

Figure 4 shows the distribution of employment spell duration, showing that most top bureaucrats do not

[6] For simplicity the subscript j for the employment spell number of the individual is not shown in equation 1.

have life-long careers in such positions in the ministries, as the median length of an employment spell was five years. However, a significant number of employment spells also lasted more than 10 years, and the longest employment spell was 36 years.

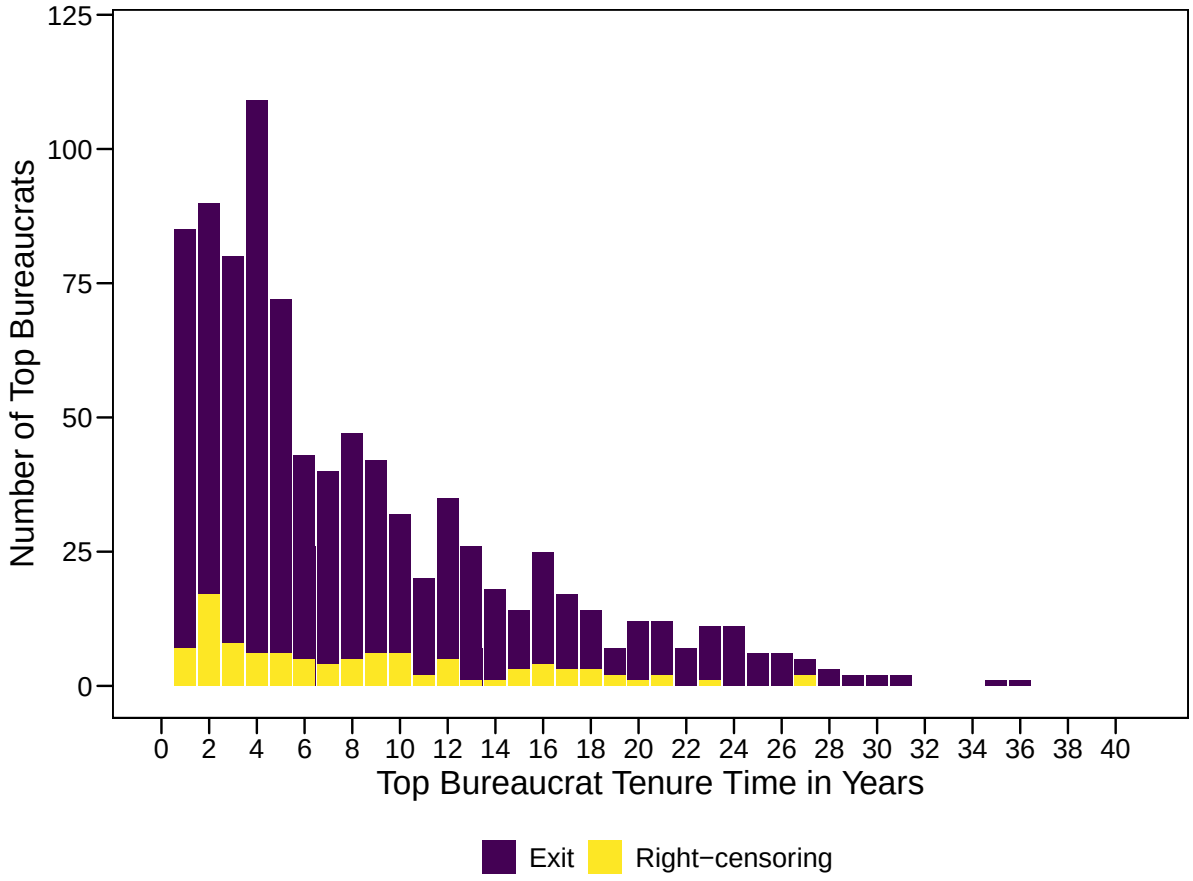


Figure 4: The number of top bureaucrats that exited their position at different intervals of tenure in years. For Right-censored employment spells the figure shows tenure length in years at point of censoring.

5.2 Estimator and control variables

The model is estimated with fixed effects for time$_{it}$, that is bureaucrat i's continuous employment tenure (in number of years) in a top bureaucrat position in year t to limit comparisons to bureaucrats that have been employed for the same number of years, as tenure should naturally impact bureaucrats propensity to exit – this approach is equivalent to duration modeling of the baseline hazard of turnover (Ward & Ahlquist, 2018). Moreover, the model implements fixed effects for ministry to account for ministry specific factors that are constant over time may impact both turnover and organizational buffering, and fixed effects for the decade that year t belongs to, to restrict comparisons of years with government turnover to other years within the same decade.[7]

[7]Year fixed effects would be ideal to deal with temporal changes, but cannot be implemented as *government turnover* is a dummy variable for a change in government taking place in year t. There is no variation within a year t for whether or not a government turnover took place. Hence *government turnover* would be perfectly multicollinear with the year fixed effects for the years t with a change in government.

OLS with fixed effects for spell time is used for the main models as this approach is equivalent to more complicated duration models, such as Cox regression (Cox, 1972) and logistic regression with cubic time splines (Carter & Signorino, 2010), with the added benefit of producing results on the same scale as the data, making for more intuitive inference about the substantive effect sizes (Hellevik, 2009). OLS is also less sensitive to model specification error – particularly when the models get more complex with multiple interaction terms and fixed effects. However, to guard against the results being driven by the choice of estimator, and as Cox proportional hazard regression (Askim et al., 2022; Christensen et al., 2014; Dahlström & Holmgren, 2019; Fleischer, 2016; Petrovsky et al., 2017) and conditional logistic regression with time splines (Carter & Signorino, 2010; Cooper, 2020) are commonly used with event-history data of top bureaucrat careers the models are also re-estimated using these techniques to show robustness. Finally, the models are estimated with standard errors clustered on the individual in the main models, to account for the same individual having multiple employment spells.[8]

The non-democratic changes in government in 1940 and 1945 are omitted from the analysis in the main models as these were not events of government turnover in a democratic system, but rather events of regime change to and from autocratic occupation where other dynamics are at play for the politicization of top bureaucrat turnover, as is evident from the outlier proportion of turnover in these years in figure 5. Top bureaucrats in office at the start of 1940 are right-censored to handle this.

$\theta_{\mathbf{c_{it}}}$ denotes a vector of additional variables to control for potentially confounding individual and temporal factors. Government turnovers are exogenous from the characteristics of individual top bureaucrats. The effect of government turnover on top bureaucrat turnover should only be confounded by election years, as government turnovers are more likely following a parliamentary election, and top bureaucrats may (with this knowledge) also be more likely to leave their positions in these years, as the end of an electoral term may be a natural point to seek out new job opportunities. Bureaucrats may also leave their positions preemptively anticipating a change to an ideologically opposed government after an election (Dahlström & Holmgren, 2019, p. 830). Hence, *election year* is included as a control for years with parliamentary elections (data from (Coppedge et al., 2021)). Furthermore, a control variable for whether an observation is in the 1884-1905 period is needed since Norway was still in a political union with Sweden in this period, hence any government decisions regarding top bureaucrats had to be made from Sweden, and government turnover was conditional on the approval of the Swedish King (which was not always given) (Kolsrud, 2001).

The analysis controls for three individual-level factors that potentially confound the relationship between bureaucratic buffer and top bureaucrat turnover: *Age, gender, and temporary appointment*[9] can impact both

[8] Performing the significance tests with standard errors that are clustered on the ministry within which an employment spell is located in a given year, to adjust for ministry-specific heterogeneity (Cooper, 2020, p. 319; Dahlström & Holmgren, 2019, p. 831) does not change the results.

Table 2: Descriptiv statistics: All top bureaucrats

Statistic	N	Mean	St. Dev.	Min	Max
Top bureaucrat tenure length in years	8,571	13.646	7.824	1	36
Top bureaucrat turnover	8,571	0.107	0.309	0	1
Government turnover	8,571	0.221	0.415	0	1
Bureaucratic buffer	8,571	0.697	0.459	0	1
Political buffer	8,571	0.864	0.343	0	1
Election year	8,571	0.253	0.435	0	1
Age	8,571	54.042	7.820	29	70
Gender	8,571	0.147	0.354	0	1
Temporary appointment	8,571	0.049	0.215	0	1
Exposed to government turnover	8,571	0.927	0.260	0	1
Ministry of Foreign Affairs	8,571	0.096	0.295	0	1
Before-1906	8,571	0.033	0.178	0	1
PM-party share of cabinet	8,571	0.729	0.273	0.111	1.000
Time since ministry created	8,571	68.908	59.307	0	205
Ministry terminated	8,571	0.022	0.146	0	1

the propensity of top bureaucrats to be employed in a position directly below the minister and their risk of turnover, and are therefore controlled for.

Table 2 shows the descriptive statistics for all the variables used in the analysis for all top bureaucrats. Descriptive statistics for level-1 and level-2 bureaucrats separately are available in table **??** and **??** in Appendix **??**.

6 Results

Before turning to the results of the regression, it is useful to see if evidence of organizational buffering moderating the effect of government turnover on bureaucratic turnover is present descriptively. How the proportion of top bureaucrats leaving the ministries changed over time is shown in figure 5. The share of top bureaucrats that exits a ministry each year has been between 5 – 20%, with the average percentage of turnover being 11%. Exemptions to this relates to the 1940-1945 WWII occupation of Norway where 53% of top bureaucrats left their positions in 1940, and 81% of the top bureaucrats exited office following the end of the WWII occupation.

Using the boxplots in figure 6 a difference can be observed in the average yearly turnover of level-1 bureaucrats in years with (11.3%) vs. without (7.6%) a change in government. For level-2 bureaucrats, the difference in turnover rates is flipped, with the average being 11.9% in years without a change in government, and 9.8% in years with a change in government. Moreover, for level-1 bureaucrats, the figure shows that the average percentage of turnover in years with a change in government is at its highest (14.2%) when they have a political buffer and that there is little difference in turnover percentage in years with (9%) vs. without (8%) a change in government in the absence of this buffer.

[9] See the appendix for details about how the control variables are operationalized.

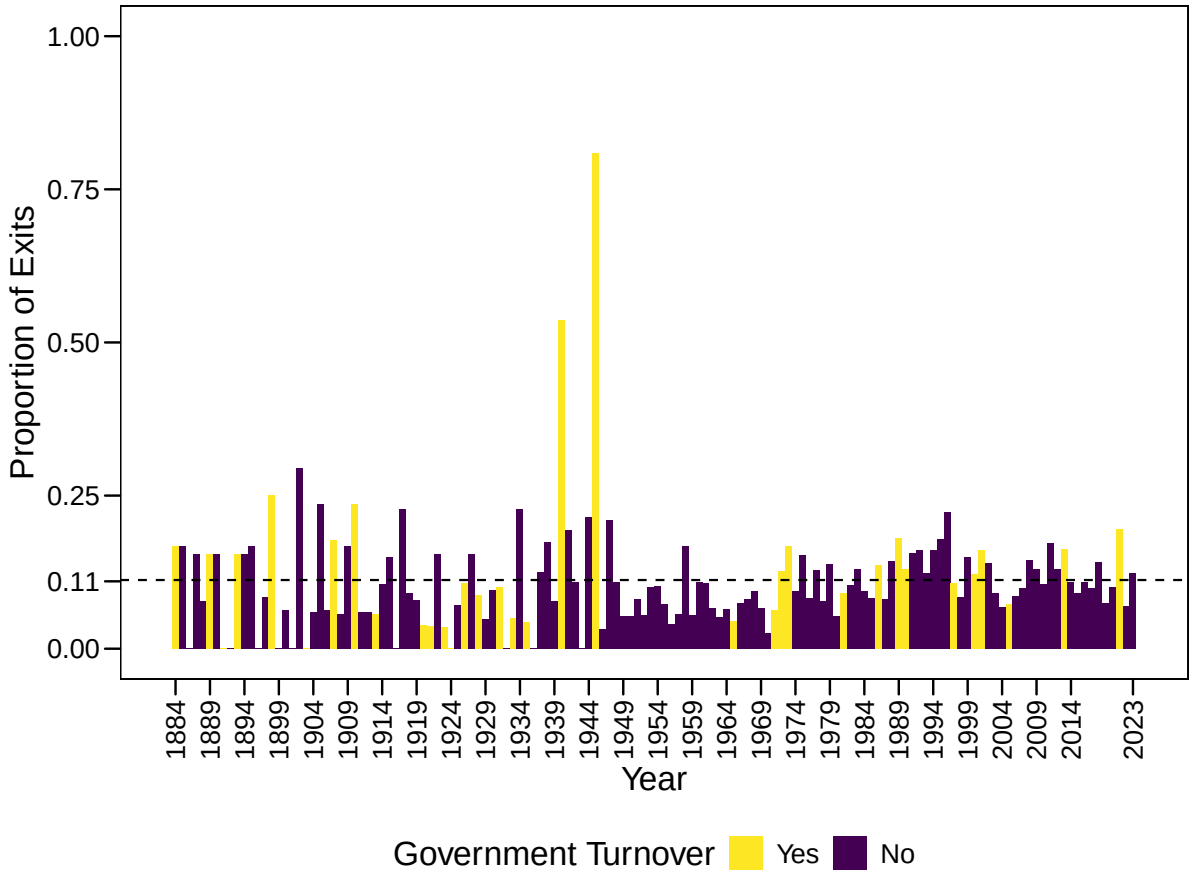


Figure 5: The proportion of top bureaucratic turnover 1884-2024. The Horizontal line depicts the average yearly proportion of top bureaucrat exits.

In a next step, complexity is added to the model by estimating Kaplan-Meier survival curves that in addition to government turnover and political and bureaucratic buffering take into account the length of employment of top bureaucrats[10]. For top bureaucrats without bureaucratic buffering, a growing gap in survival probability when their tenure is more than 5 years is visible in the survival curve between years with government turnover compared to those without, with the survival probability over their employment spell being lower in the latter case. For level-2 bureaucrats, no such gap exists. When it comes to the effect of a political buffer the results run opposite, with there even being higher survival probability for level-1 bureaucrats in years with government turnover, when they have between 4-8 years of tenure and no political buffer.

Turning to the main results, panel 1 in table 3 shows that the marginal effect of government turnover increases the probability of bureaucrat turnover by 3.9% for level-1 bureaucrats (significant at $p < 0.05$), whereas for level-2 bureaucrats there is no significant difference in turnover between years with vs. without government turnover with an estimated marginal effect of close to zero (0.7%). Comparing the marginal

[10]Calculated for each employment spell time t with an instance of top bureaucrat turnover in the government turnover and organizational buffer group, as a product of the proportion of all top bureaucrats that where at risk and not dismissed at time t and the survival proportion at times $t_i < t$. Therefore, the combination of people that make up each group at each time of the employment spell t will vary, as a level-1 bureaucrat in a year with government turnover $t = 1$ will not be in this group in $t = 2$ if there is no government turnover at that time, but may be so again at a later point in their employment spell $t = i$. This implies that the estimated survival curve is only a product of the observed turnover proportion in a group at time $t_i < t$ and not affected by different top bureaucrats entering and exiting the group without an event, nor by right-censored employment spells.

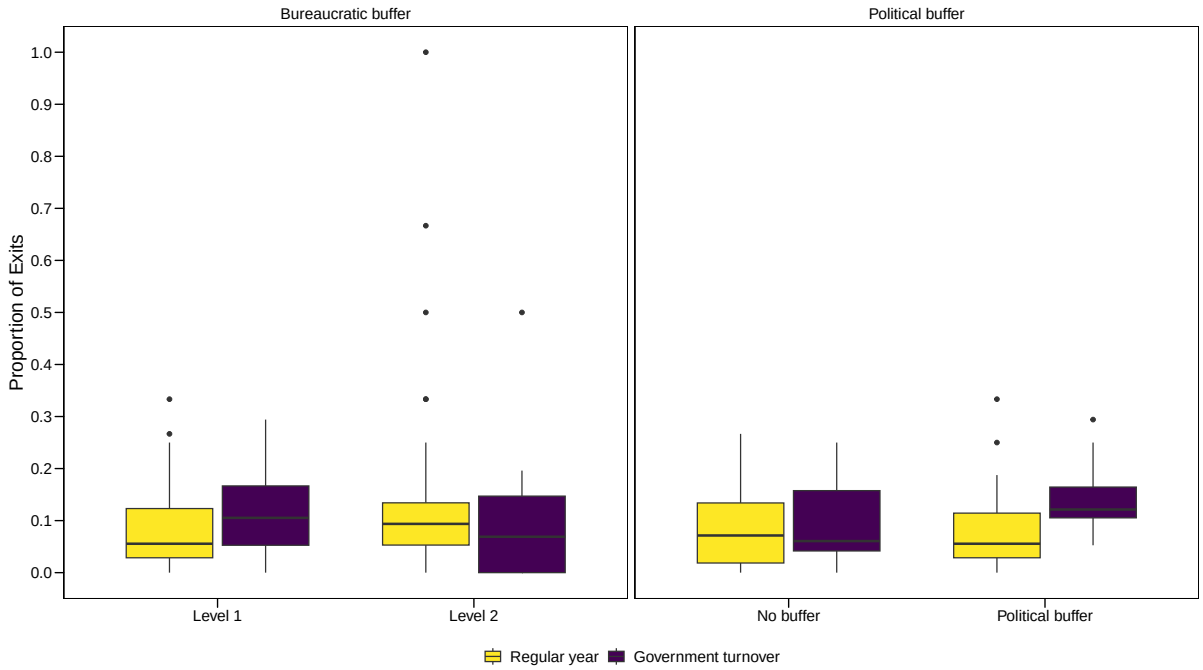


Figure 6: Boxplot of the proportion of top bureaucrat turnover in years with and without government turnover subset by organizational buffering.

effect of government turnover for level-1 and level-2 bureaucrats the table shows that the marginal increase in turnover probability is −3.1% less for level-2 bureaucrats (significant at $p < 0.1$). Thus, in line with H1, the effect of government turnover is decreasing with organizational buffering, when organizational buffering takes the form of a hierarchical level of bureaucratic appointees.

In the case of political buffering the observed difference of a change in government between level-1 bureaucrats with and without a level of political appointees between them and the minister, that went counter to H1 in the descriptive plots, also remains in the marginal effects reported in panel 2 of table 3. For level-1 bureaucrats without a political buffer, the marginal effect of government turnover is 0.7% and this effect is not significant at conventional levels. However, when there are political appointees working in the ministry the turnover probability of level-1 bureaucrats are 7% higher in years with government turnover in comparison to regular years, all else equal (significant at $p < 0.01$). Moreover, the estimated difference-in-differences between the two groups of top bureaucrats of 6.4% is significant at $p < 0.05$). In other words, contrary to H1, the effect of government turnover is increasing with organizational buffering, when organizational buffering takes the form of a hierarchical level of political appointees.

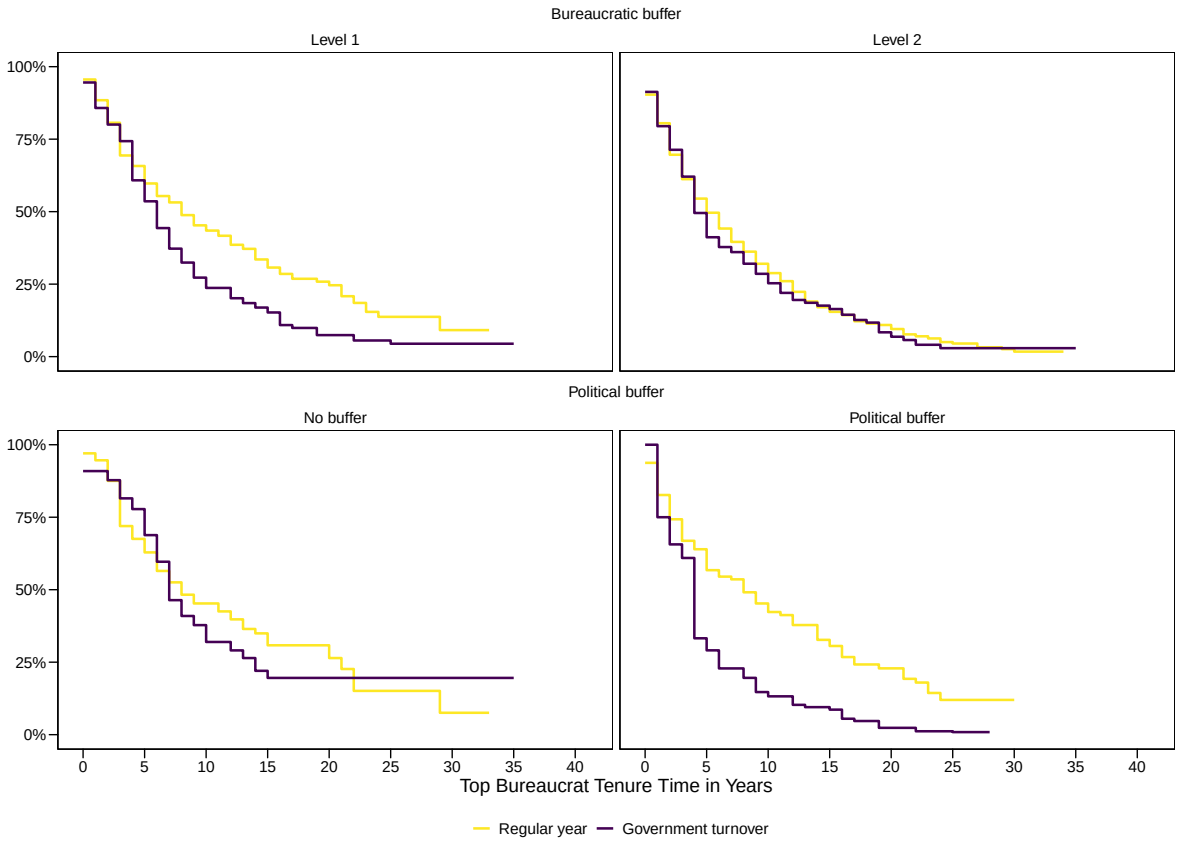


Figure 7: Kaplan-Meier survival curves for top bureaucrats in years with and without government turnover, subset by bureaucratic and political buffering

6.1 Robustness Tests

To investigate the sensitivity of the main results to alternative specifications of the model, a numbers of robustness tests have been carried out[11]. As can be gleaned from figure 8 re-estimating the main regression models with Cox regression, or logistic regression with time splines instead of fixed effects for spell year does not change the direction of the effects nor their level of significance. For bureaucratic buffering the marginal effect of government turnover is robustly positive and significant at $p < 0.05$ across alternative estimators for level-1 bureaucrats, and not significant for level-2 bureaucrats. The difference-in-difference estimate show that the hazard of turnover is 32.8% (in the cox model) lower for level-2 bureaucrats compared to level-1 bureaucrats after a change in government. For political buffering the direction and level of significance of effects also remain the same, with level-1 bureaucrats with a political buffer having 88.4% higher risk of turnover than level-1 bureaucrats without a political buffer after government turnover.

The main results with regard to political buffering are robust across different estimators, different operationalizations of the dependent variable and the inclusion of additional mediating variables as controls. For bureaucratic buffering the results are some factors

The difference in marginal effects between level-1 and level-2 bureaucrats becomes non-significant at

[11] Tables and figures for all models are available in the appendix

Table 3: Main results on organizational buffering moderation of the marginal effect of government turnover

Panel 1: Bureaucratic Buffer			
Marginal effect group	*Estimate*	*Standard error*	*P-value*
Level 1	0.039	0.016	0.014
Level 2	0.007	0.011	0.512
Difference-in-Differences	-0.031	0.018	0.086
Average bureaucratic turnover	0.102		
N	Obs: 8382	Spells: 1046	Events: 856
Panel 2: Political Buffer			
Marginal effect group	*Estimate*	*Standard error*	*P-value*
No buffer	0.006	0.021	0.787
Political buffer	0.07	0.023	0.003
Difference-in-Differences	0.064	0.03	0.035
Average bureaucratic turnover	0.08		
N	Obs: 2467	Spells: 300	Events: 198

Note: The table reports the group-average marginal effects (G-AME) of *government turnover* on b*ureaucratic turnover* obtained from predictions using OLS models with fixed effects for tenure year, decade and ministry. The models also includes covariates for election year and government independence, as well as a set of individual characteristics: age, gender, and temporary appointment. The WWII years are dropped from all models. Standard errors are clustered on individuals. The dependent variable is turnover of individual bureaucrats. The N-row displays the number of individual-year observations, followed by the number of employment spells and the number of bureaucratic turnover events. The variation in N is due to panel 2 only includes level 1 bureaucrats.

conventional levels in the models that have a less conservative operationalization of top bureaucrat turnover (figure 9. In these models, government turnover also has a positive effect on the turnover of level-2 bureaucrats that is significant at $p < 0.05$, although it is still estimated to be smaller than for level-1 bureaucrats. A possible explanation for this is that government turnover sometimes also affects the organization of the ministries (Fleischer et al., 2023), hence causing level-2 spells to continue in a different ministry after a change in government, and the likelihood of promotion to level-1 also increases as the incumbent level-1 bureaucrats are more likely to be dismissed.

The findings for both tests of H1 are, as shown in figure 10 robust to the inclusion of additional mediator variables that account for heterogeneous effects within ministerial contexts over time. A government's ability to politicize top bureaucrat turnover may also vary with its party composition, as coalition governments will have more heterogeneous preferences (Dahlstrom & Niklasson, 2013). Including PM-party share of cabinet in the model does not change the results, and shows that the effect is the same across single-party governments and coalition governments of varying degree of fragmentation. Accounting for how governments preferences for controlling organizations may vary with their institutionalization (Cooper, 2017; Ennser-Jedenastik, 2016a), by adding a continuous variable that increases by a value of one for each year after the ministry was established, does not change the results. Similarly, excluding top bureaucrat turnover caused by ministerial termination, by controlling for a year being the last year that a ministry existed, using data on ministries from the Norwegian State Administration Database (Sikt, 2024a), does not significantly alter the

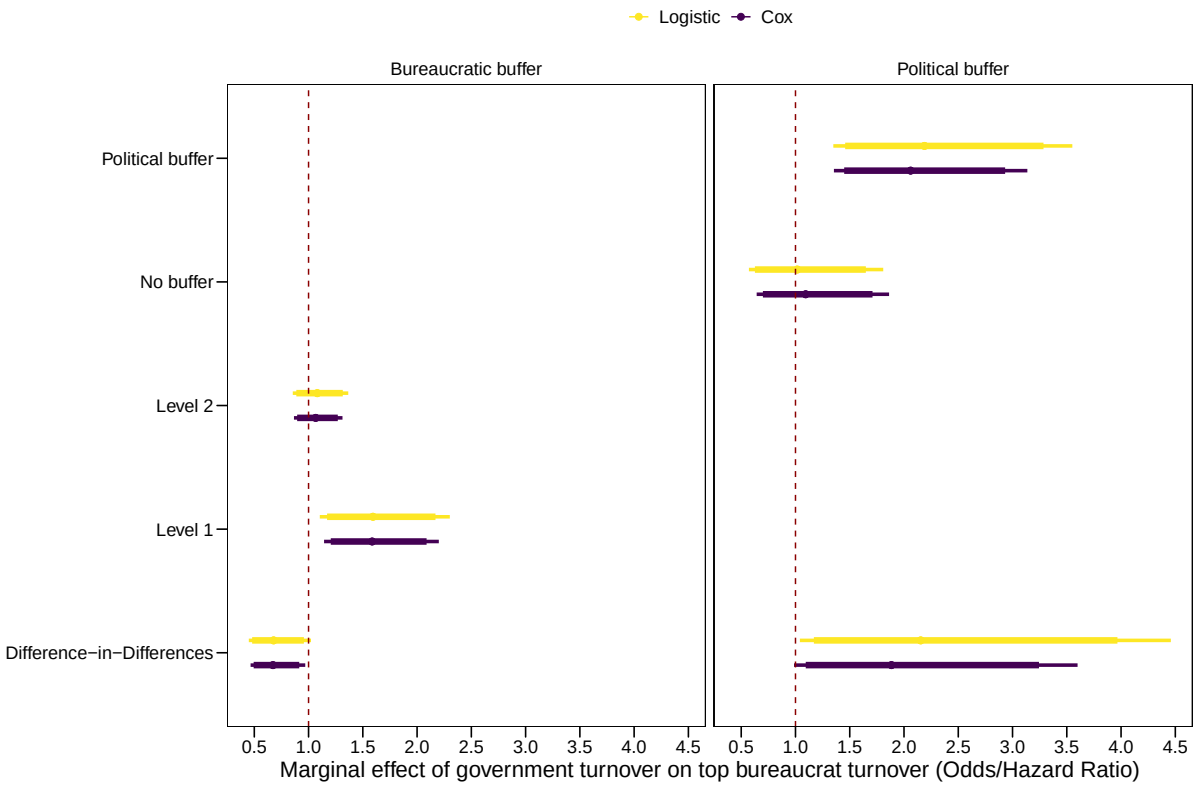


Figure 8: Hazard/Odds ratios with 95% (small stroke width) and 90% (big stroke width) confidence bands for the marginal effect of government turnover when estimating the effect with alternative estimators. Both Hazard ratios and Odds ratios can range from $0 \rightarrow \infty$, with the value 1 indicating no difference in Odds/hazard. Values below 1 indicate a negative effect with a decrease in the chance for bureaucrat turnover in years with government turnover compared to years without (all else equal). Conversely, values above 1 indicate a positive effect and an increase in the probability of bureaucratic turnover.

results.

The instrumental value of politicizing top bureaucrat turnover to ministers operating under meritocratic restraints may not only be impacted by the hierarchical placement of the top bureaucrat position, but also by the degree of fragmentation of power and specialization within the same hierarchical level (Christensen & Opstrup, 2018). The political control benefit of interfering in the staffing of level-1 bureaucrats after a change in government may thus be higher when hierarchical authority of the ministry is condensed in one level-1 bureaucrat, instead of being spread between multiple level-1 bureaucrats. However, controlling for the existence of multiple level-1 bureaucrats within a ministry does not change the fact that governments are more willing to replace level-1 bureaucrats than level-2 bureaucrats in conjunction with government turnover.

Lastly, figure 11 looks at how the effect of government turnover under organizational buffering differ for other operationalizations of government turnover. Firstly, the figure shows that the probability of bureaucratic turnover for level-1 bureaucrats (with a political buffer) is only significantly higher in the years that the change in government took place. The figure suggests that bureaucrats do not exit office early in anticipation of a change of government as the estimates of the marginal effects of there being government turnover in the following year (t+1) does not have a significant effect on top bureaucrat turnover probability, regardless

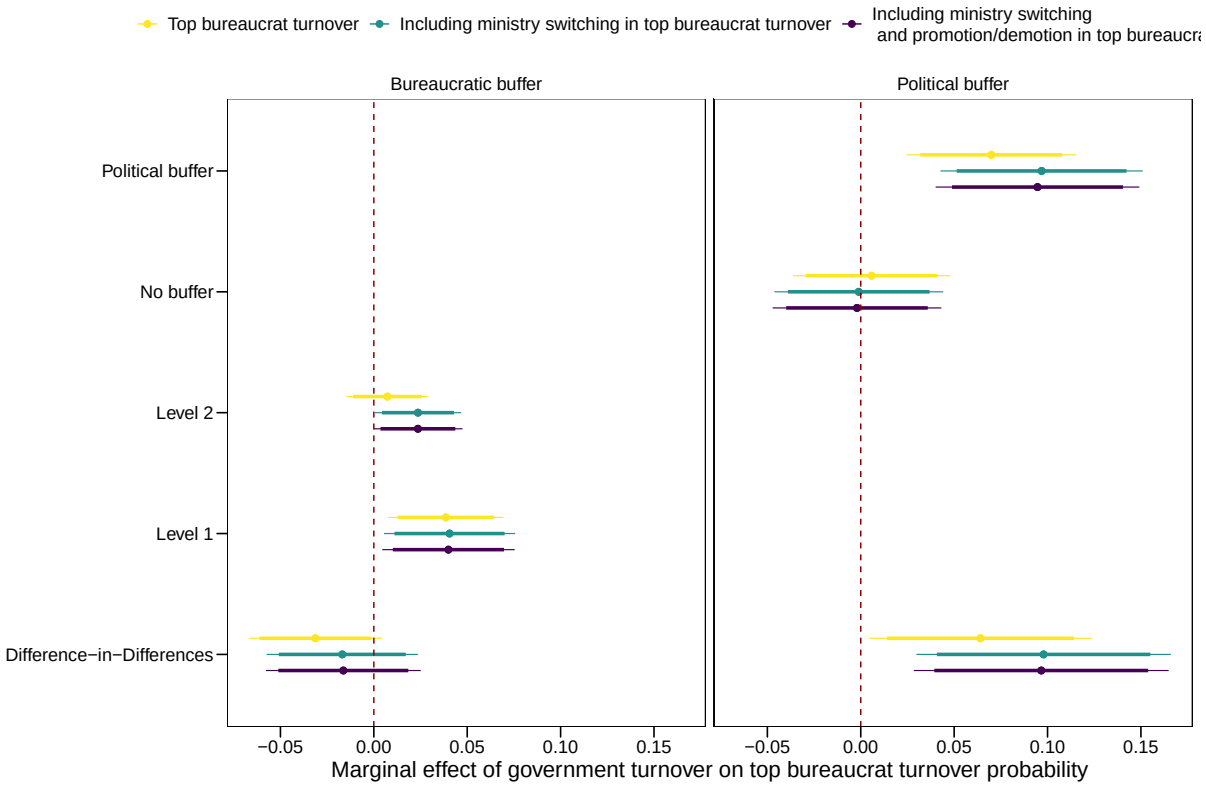


Figure 9: Marginal effects with 95% (small stroke width) and 90% (big stroke width) confidence bands for the marginal effect of government turnover on alternative specifications of the dependent variable: top bureaucrat turnover.

of organizational buffering, in the year of observation (t). Similarly, there are no significant effects of top bureaucrats (regardless of organizational buffering) being more or less likely to exit their positions in year t following government turnover in t-1. In other words, the shock of a change in government does not have lingering effects on top bureaucrat exit rates, they are either replaced (or leave willingly) shortly after (or before) the change in government.

7 Exploring potential mechanisms

Looking at figure 11 there are no significant effects of a change in the minister (minister turnover) in the absence of a wholesale change in the party composition of the government, with the estimate for level-1 bureaucrats with a political buffer even pointing towards these bureaucrats being less likely to leave after a change in the minister – however this effect is not significant at $p < 0.1$. Supporting an explanation of there being the ideological change in policy preferences brought on by government turnover that impacts level-1 bureaucrats turnover propensity, and not changes in the ministers personal characteristics. These findings are consistent with those of Askim et al. (2022), but runs contrary to the findings of Staronova and Rybar (2021) in a context where bureaucratic appointments also are politicized based on personal loyalty to the minister independent of the ministers political party.

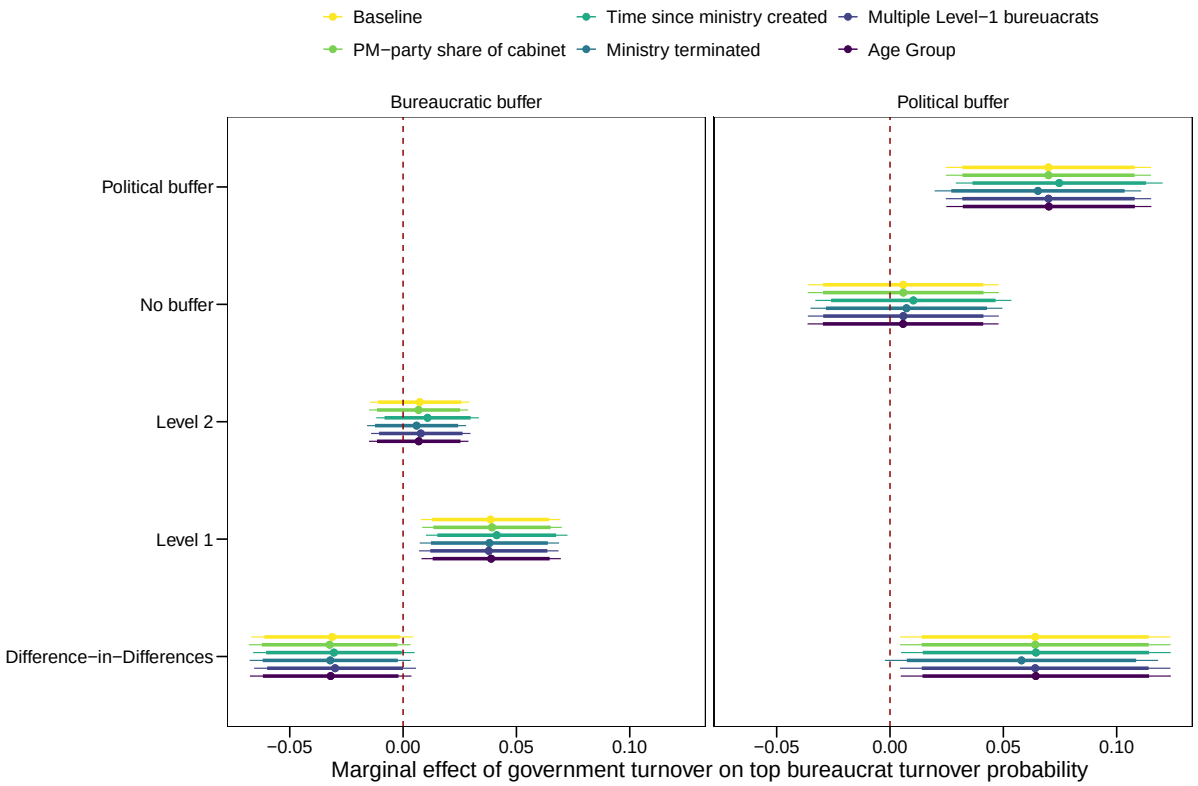


Figure 10: Marginal effects with 95% (small stroke width) and 90% (big stroke width) confidence bands for the marginal effect of government turnover.

Operationalizing government turnover as *party incongruence* between the appointing and dismissing government[12] does not yield any significant results. The estimated marginal effect of the appointing party exiting office on all top bureaucrats turnover probability is close to zero, with the 95% confidence interval covering both positive and negative values. This differs from the findings of Dahlström and Holmgren (2019) of agency heads in Sweden being less likely to be replaced when a government with the same ideological preferences as the appointing government is in power. One possible explanation for this difference is that the partisanship of ministry bureaucrats are more malleable to change toward the political preferences of the current government due to having more frequent contact with the minister (Geys et al., 2024) and operating within a culture where loyalty to the minister is a stronger norm. Agency heads are on the other hand working more autonomously from the minister, in Sweden even more than in Norway, implying that their partisan preferences should remain more stable over time (Geys et al., 2024). This difference in autonomy could also lead to conflicts or distrust between a new minister and agency heads appointed by previous governments emerging at any point during their time in office instead of within the first year after a change in government. For level-1 bureaucrats in Norway it is the short-term shock of an ideological change in the minister that matters for their propensity to be replaced, in the long-term they can adapt to serve any political master.

[12] Specifically defined as a dummy variable that keeps the value 0 for individual i in employment spell j in years t where the party of the Prime Minister is the same as in the year when individual i where appointed "min(t)", and 1 in years where the Prime Minister hails from a different party. This is in line with what Dahlström and Holmgren (2019, p. 829) labels cabinet turnover, and Christensen et al. (2014, p. 229) labels party difference between appointing and dismissing minister. The choice of focusing on the party of the prime minister,

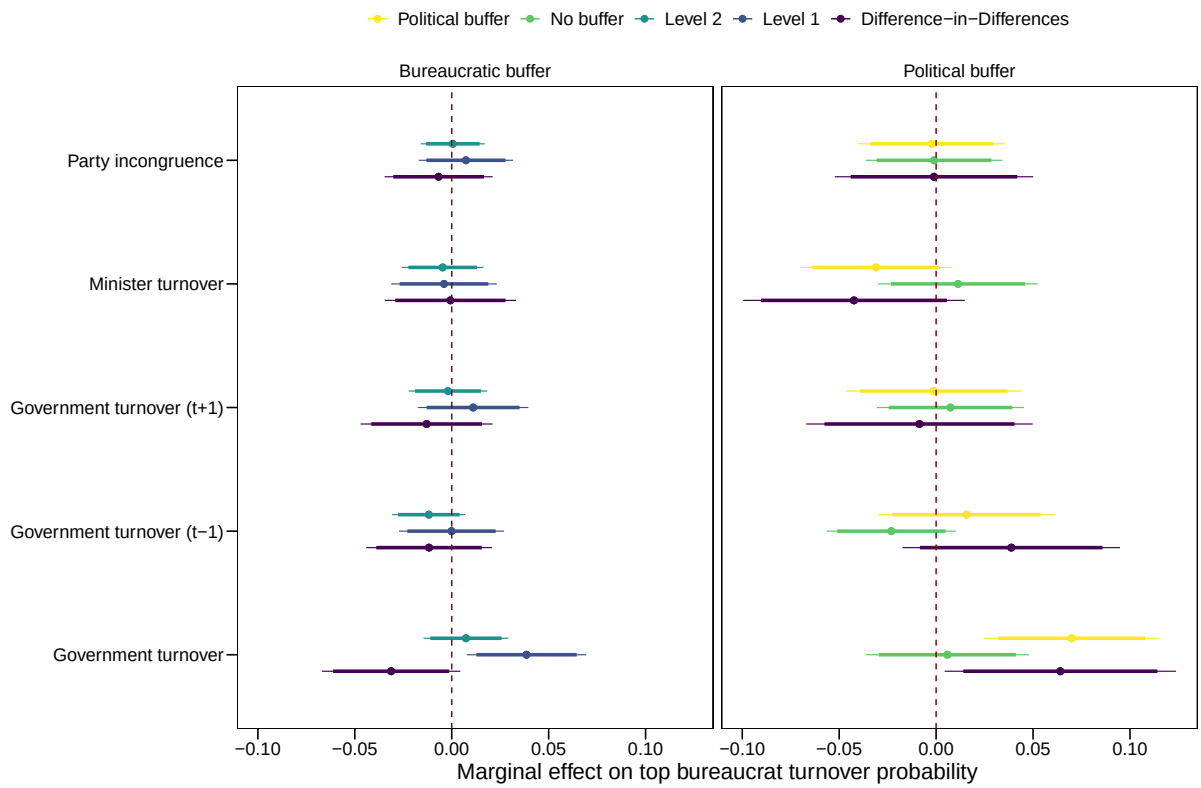


Figure 11: Marginal effects with 95% (small stroke width) and 90% (big stroke width) confidence bands for the marginal effect of government turnover.

Returning to the debate of the observed pattern of top bureaucrats being more likely to be replaced after a change in government is driven by the strategic actions of incoming ministers or if it is the product of top bureaucrats self-selecting out of office as years with a change in government is a convenient time to change job or retire. The results presented in figure 12 approach this question by asking if there is a difference in the marginal effects of government turnover on bureaucratic turnover for level-1 and level-2 bureaucrats when the change in government occurs after an election rather than within term. Leveraging the fixed nature of elections in Norway, top bureaucrats can perfectly plan their exit in advance in instances with election-induced change of government, while within term changes in governments depend on coalition breakdown that should be exogenous to the long term career plans of top bureaucrats. Looking at the difference in marginal effects of government turnover between regular years and election years for level-2 bureaucrats the results are in line with the mechanism through which a change in government affects their propensity to be replaced being one of career planing as their turnover probability is higher (significant at $p < 0.1$) only when the change in government occurs after an election. When the change in government happens in a regular year the estimate is negative but not significant for level-2 bureaucrats. Conversely, for level-1 bureaucrats this relationship

instead of a left-right dichotomy, comes down to parties changing their ideological position over the 140 year period. For instance, in the late 1800s governments shifted between the Liberal Party and the Conservative Party, whereas both parties were a part of the same coalition government in the 2010s. Moreover, alternative operationalizations of the variable looking at a difference in the ministers party, whether the party of the appointing minister is part of the governing coalition, or categorizing governments into left-leaning or right-leaning governments yields substantially similar null results.

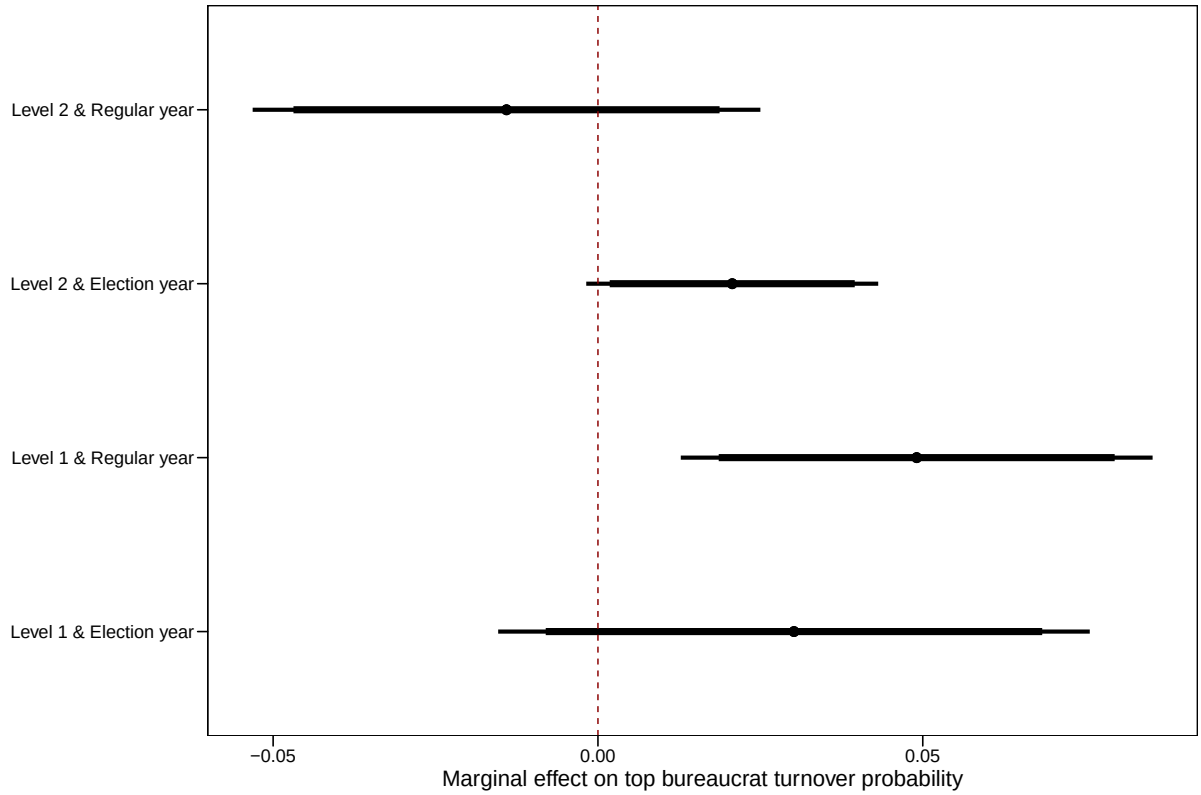


Figure 12: Heterogeneous effects by election induced government turnover and within term government turnover.

is flipped with government turnover in the absence of an election increases turnover probability by about 5% (significant at p < 0.01). The estimate effect for election years are smaller but also positive for level-1 bureaucrats, however this estimate is not statistically significant at conventional p-values. This points toward the mechanism not being career planning by level-1 bureaucrats.

Figure 13 shows marginal effects of government turnover on bureaucratic turnover when breaking the level-1 bureaucrat category into the two different types of level-1 bureaucrats in the data, directors general or permanent secretaries to see if it is just the level of bureaucratic buffering that matters for the level of politicization of top bureaucrat turnover, or if new governments propensity to replace level-1 bureaucrats also depend on the functional nature of the position. Showing that government turnover only has a significant positive effect ($\beta = 0.07, p < 0.001$) for level-1 bureaucrats when the level-1 position in the ministry is a permanent secretary, and that this effect is significantly higher than not only the marginal effect for level-2 directors general, but also than directors general when they are the highest ranked bureaucrat in the ministry (level-1). Whereas the estimated marginal effects is lower for level-2 directors general compared to level-1 directors general this difference, in line with H1, this difference is small and not statistically significant at conventional levels. Thus, organizational buffering in the form of a bureaucratic layer insulates level-2 bureaucrats from politically induced turnover in a context of a meritocratic appointment system, the absence of bureaucratic buffering is necessary for government turnover to have a positive effect on the turnover of

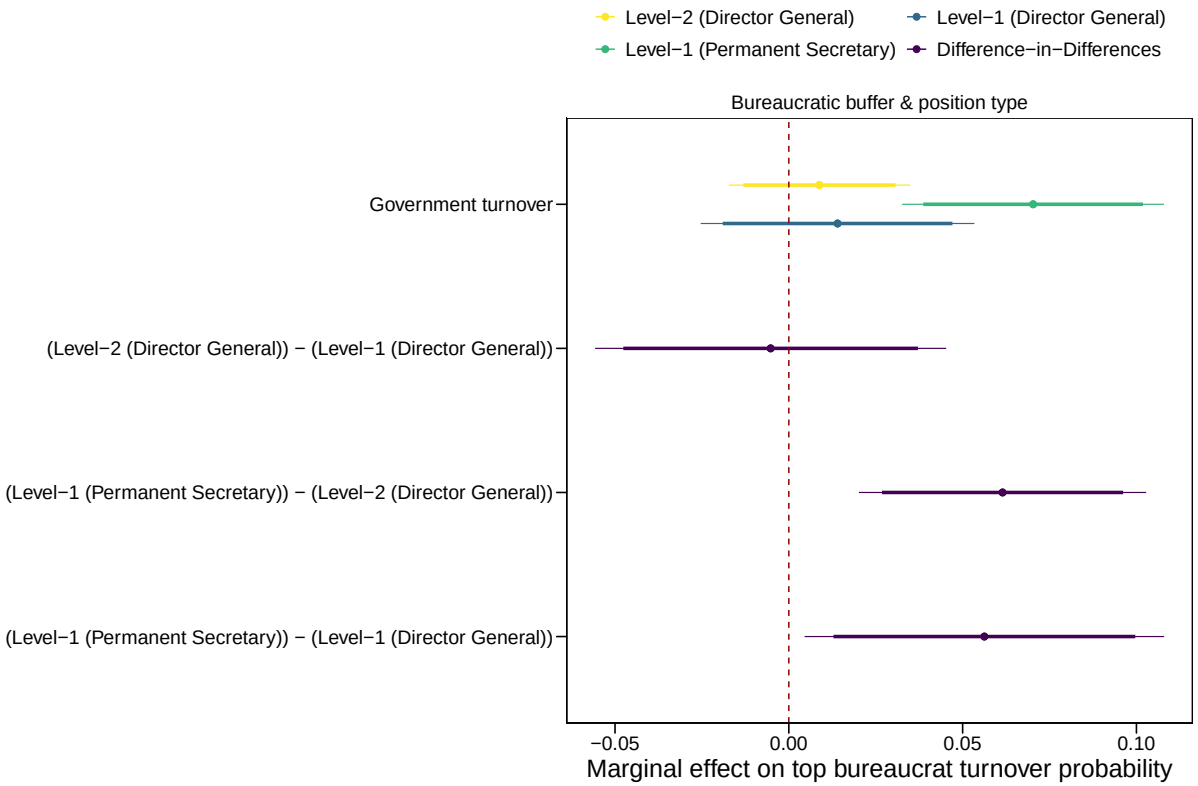


Figure 13: Marginal effects of *government turnover* on *bureaucratic turnover* conditional on bureaucratic buffering and position type obtained from predictions using OLS models with fixed effects for tenure year, decade and ministry, and a vector of control variables (see note to table 3 for additional information). N = 1367 Level-1 (Director General), 1100 Level-1 (Permanent Secretary), 5915 Level-2 (Director General). Difference-in-Difference estimates are pairwise comparisons of the marginal effects of government turnover.

top bureaucrats, but is not a sufficient mechanism in itself. For level-1 bureaucrats to be more likely to be replaced by new governments the level-1 position also need to have sufficiently functionally politicized tasks to motivate new ministers to deviate from the meritocratic norms.

It is difficult to isolate the causal effect of organizational buffering on the relationship between government turnover and bureaucratic turnover using the Norwegian data as most of the ministries implement state secretaries and permanent secretaries in the first 15 years after WWII, in a period where there are no instances of government turnover. However, with the caveat of limited statistical power resulting in the need to group years of observations into 15-20 year time periods, we can investigate the difference in the marginal effect of government turnover on the turnover of general directors in the periods before and directly after receiving a layer of organizational buffering to strengthen confidence about the results being produced by the difference in bureaucratic buffering and not unobserved factors. Similarly, we can compare the marginal hazard for directors general at level-1 with the marginal hazard for the new permanent secretary positions. The somewhat staggered implementation of permanent secretaries across various ministries, with 1 ministry being treated as early as 1921 and 25% of ministries being treated after 1965 provide suitable variability in the number of top bureaucrats at risk in ministries with and without permanent secretaries at different instances of government

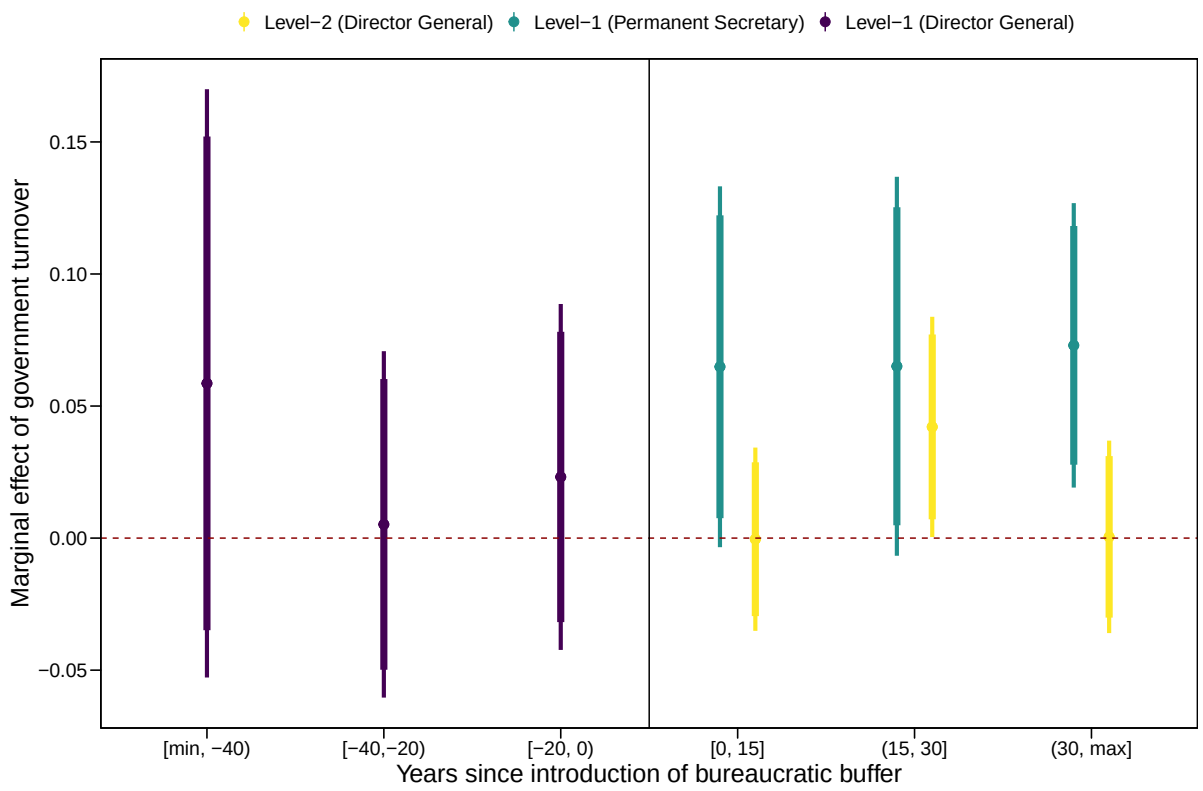


Figure 14: Event study estimates of the changing marginal effect of government turnover on bureaucratic turnover in 3 periods before and after the introduction of permanent secretaries as an organizational buffer in a ministry, distinguishing between the effect on level-1 and level-2 bureaucrats, and the different type of level-1 bureaucrats. Observations in ministries that never introduced the position of permanent secretary before being terminated are excluded from the model (N = 222). The X-axis shows the time intervals in number of years relative to the introduction of permanent secretaries in a ministry, i.e. *[-20, 0)* includes all bureaucrat-year observation in the interval 20 years to 1 year before a permanent secretary is appointed for the first time in their ministry (N = 511), and *[0, 15]* all bureaucrat-year observation in the first 15 years after a permanent secretary is appointed (N = 476 Level-1 (Permanent Secretary), N = 2050 Level-2 (Director General)). Each bureaucrat-type-interval has at least 200 observations total with 55-596 observations in years with government turnover. Min(year) = -77 and max(year) = 100.

turnover, making inference more robust from temporal changes.

As for whether or not the results are impacted by the changing nature of the top bureaucrat positions over time, figure 14 shows that the marginal effect of government turnover on the turnover probability of level-1 bureaucrats first have a positive effect that are significant at conventional levels when the permanent secretary positions become the level-1 position in the ministry. The effect of government turnover significantly increases the turnover probability of permanent secretaries by about 6.5% in the first 15 years after the position is introduced at level-1 in a ministry, and in the long term. When directors general were the highest level bureaucrat in the ministry their exit rates did not significantly vary between regular years and years with government turnover. For level-2 bureaucrats the marginal effect of government turnover is close to zero and insignificant in the short term after the introduction of a permanent secretary as an organizational buffer and in the long term. In the intermediate time interval of 15-30 years after the introduction of the organizational buffer government turnover appears to have a positive effect of 4.2% (significant at $p < 0.1$) on the turnover

probability of level-2 bureaucrats. A possible explanation for this is that the introduction of the additional layer between these top bureaucrats and the political level does not immediately motivate the departure of incumbent bureaucrats that are essentially demoted, which is also the case when layering is deliberately used as a politicization technique to get rid of unwanted bureaucrats (Lewis, 2008). However, it may change the director generals propensity towards strategic exits after a change in government in the intermediate time horizon – or it may simply be an artifact of the context in the few years with government turnover in this time frame.

8 Concluding Discussion: The Difference between Bureaucratic and Political Buffering and the Necessity of Functional Politicization

Organizational buffering plays a crucial role in mediating the degree to which bureaucratic turnover is politicized by new governments seeking to strengthen their control over the bureaucracy. However, the analysis showed that not all forms of organizational buffering had the same effect on top bureaucrats exit probabilities following a change in government, there is a difference between organizational buffering taking the form of a layer of politically appointed or meritocratically appointed bureaucrats. Top bureaucrats who do not have a bureaucratic buffer from the minister are impacted by a change in government to a greater extent than other top bureaucrats. Conversely, when organizational buffering takes the form of political appointees between the highest rank of top bureaucrats and the minister, the effect runs opposite, only increasing top bureaucrat turnover in periods when the steering of the ministries is politicized by the employment of political appointees.

The introduction of a politically employed hierarchical level above the Level-1 bureaucrats may have a different effect than a bureaucratic organizational buffer on the payoff ministers receive from replacing Level-1 bureaucrats. Askim et al. (2022) has argued that the existence of political appointees in the form of state secretaries in the executive make new governments less dependent on top bureaucrats when entering office. Instead, they can draw on the competence of politically selected state secretaries with both political and subject expertise when entering office. Particularly, they are less dependent on the political-tactical advise of top civil servants which the top civil servants on top of the ministerial hierarchy have a bigger part in delivering. In other words, the political buffer can make level-1 bureaucrats expendable after a change in government, as the minister can appoint state secretaries to carry out the tasks of the bureaucrat, without such an option “the new minister’s chance of getting off to a good start is vitally dependent on the incumbent permanent secretary” (Askim et al., 2022, p. 11). Furthermore, as the selection of top bureaucrats is largely made from candidates inside the ministries (Askim et al., 2022), information on the pool of candidates with suitable professional experience that the government trusts share their policy preferences may be higher and easier to process with state secretaries.

Viewing this argument in a strategic-exit perspective one could explain the increase in turnover following a change in government with the existence of political appointees not only changing the ministers' dependence, but also the interdependence between top civil servants and ministers after a change in government. The top civil servants directly below the minister become less needed as a functional link in the transitional phase from one government to the next. Not needing to teach ministers how to become ministers top civil servants with incompatible and non-malleable partisan preferences (Geys et al., 2024) can choose to exit their position more freely after a change in government – providing a natural endpoint to service as a top civil servant. However, as level-1 bureaucrats also leave their position at higher rates when the change in government is not caused by an election, it is more likely that the replacement is caused by the actions of the minister than strategic career planning from the side of the bureaucrats. More research is needed on the mechanisms that causes this pattern, as it can not be ruled out that the increase in turnover is the product of an immediate change in the workload and motivation of level-1 bureaucrats following the within term change in government, and that the existence of political appointees allow the bureaucrats to act on these impulses.

The comparison of level-1 bureaucrats with a political buffer, and without is also largely based on comparing two different time periods, so caution should be exercised when attributing this difference to the existence of state secretaries, and not to other temporal factors such as the institutional memory of ministries being less reliant on personnel and more on structure over time.

Organizational buffering in the form of a bureaucratic layer between top bureaucrats and the minister was found to insulate level-2 bureaucrats from politically induced turnover in a context of a highly meritocratic appointment system. This adds to previous research on the politicization of bureaucracy only finding a limited influence of politics on the bureaucratic careers of top bureaucrats (Allern, 2012; Askim et al., 2022; Dahlström & Holmgren, 2019), by showing that in the context of Norwegian ministries the permanency of bureaucrats below the highest rank is not threatened by a change in government. Moreover, the results also highlights that yearly turnover of top bureaucrats in Norwegian ministries is generally low at around 11% and that that the higher turnover spikes following government turnover are comparatively small compared to systems where the selection and deselection of top bureaucrats are formally politicized, such as in Germany where most top bureaucrats are changed out following a change in government (Fleischer, 2016), although recruitment are still made from within the bureaucracy (Veit & Vedder, n.d.).

Moreover, top bureaucrats are not affected by weaker political change in the Norwegian case, such as just a change in the minister. The results showed that an ideological change in the minister is necessary for top bureaucrat turnover to increase as a consequence of a political change regardless of organizational buffering. This is in line with research finding that in meritocratic administrative systems with a strong party tradition, politicization of administrative turnover is primarily driven by partisan motives (Askim et al., 2022; Ennser-Jedenastik, 2016b), and not personal loyalty as can be the case in formally politicized systems (Rybar & Podmanik, 2020; Staronova & Rybar, 2021). The need for a partisan change in government to impact top

civil servant turnover may stem from the minister's policy agenda largely being predetermined by the parties and detailed government coalition agreements, leaving less policy discretion to the individual ministers, thus resulting in a change in minister not having much influence on the policy-output of the ministry. A further implication of this is that the higher turnover rates following government turnover for level-1 bureaucrats are not just the consequence of a mismatch of demographic factors—such as age and gender—between the minister and the bureaucrat (Gron et al., 2021).

The main takeaway is that both level-1 and level-2 bureaucrats were strikingly unaffected by political change outside of the initial year government turnover took place. Their partisan preferences appear to be changing towards those of the government over time (Geys et al., 2024) or that they can signal preference compatibility with the new government (Veit & Scholz, 2016) regardless of the appointing government being in office, leading to most top bureaucrats being able to work for multiple governments. Importantly, as shown when decomposing bureaucratic buffering by position type, whereas the absence of bureaucratic buffering is necessary for government turnover to have a positive effect on the turnover of top bureaucrats in the Norwegian case, it is not a sufficient mechanism in itself. For level-1 bureaucrats to be more likely to be replaced by new governments, the level-1 position also needs to have sufficiently functionally politicized tasks to motivate new ministers to deviate from the meritocratic norms. This contributes to our understanding of under which conditions new governments replace incumbent top bureaucrats in merit bureaucracies, by showing that the moderating effect of organizational buffering is driven by the implementation of a new more functionally politicized bureaucratic position at the top of the ministerial hierarchy.

Paradoxically, the permanent secretary position is the only one in which the probability of turnover is higher after a change in government. The introduction of permanent secretaries as the new type of level-1 position seem to change the need for permanency at the top of the ministerial bureaucracy, particularly in the context of politically employed state secretaries increasing the ministers capacity to exhibit political control of the ministry. However, importantly, the connection between government turnover and top bureaucrat turnover does not run deeper in the least likely case of the Norwegian bureaucracy.

The general implication of the findings is that even if a country is successful in establishing a merit bureaucracy with clear division between political and bureaucratic positions and a strong culture against patronage appointments, this is not enough to break the connection between changes in government and turnover of top bureaucrats. There is still room for political influence on bureaucratic careers at the highest level of the hierarchy that can be utilized by new governments when the political value of controlling the position outweighs the costs of deviating from the merit institutions. Bureaucratic buffering moderates the value of politicizing appointments to the lower levels of the organization, as control can be obtained from the top.

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A Robustness Tests and Additional Statistics

Note: the appendix is not up to date. I will probably move more of the figures and discussions about the robustness tests to the appendix in future revisions.